

BONNEY FORGE \& TOOL WORKS -- ALLIANCE, OHIO

## MODERN

During the past 80 years, Bonney has made great strides in keeping ahead of the industry with new ideas and top quality tools. Now, with this new and modern plant in Alliance, Ohio, and the finest production facilities, Bonney can boast of having achieved the "ultimate" in tool manufacturing.

## REQUESTS FOR SPECIAL TOOLS

We welcome any request for special tools. Our Engineering and Production Departments are equipped to handle all requests of this type. Bonney has a tool for every job in its complete line of over 2800 items. Mechanics and servicemen depend on Bonney for tools that are made with their interest in mind. Many "special" tools are produced in addition to the standard line.

Below are pictured a few of the automatic turning machines found in the Machine Department. Most prominent of these are the Multiple Spindle Bar Turning machines which are used for producing socket wrench blanks, ratchet parts, and other items which require close tolerances.



In the photo on the right, we see the completely automatic plating machine which cleans and plates the tools in an uninterrupted sequence. The chrome-nickel plating process was first introduced by Bonney and has been recognized by the industry as one of the outstanding contributions in tool manufacturing.

Here we see a row of semi-automatic, atmospheric-controlled heat treating furnaces of the latest design. Each tool that passes through this Department receives individual attention as to the specific type of job it is destined to perform for the user.


The following description fully outlines the Bonney coding system for part numbers.
The Bon-E-Con (second line of tools) coding system is the same as for Bonney tool with the addition of the prefix " Z ."

## BONNEY SOCKETS

V-Denotes 1/4" Sq. Drive Tools (except refrigeration)
T-Denotes $3 / 8^{\prime \prime}$ Sq. Drive Tools
$\begin{array}{lcccc}\mathrm{A}- & " & 1 / 2^{\prime \prime} & \text { " } & \text { " } \\ \mathrm{R}- & " & 3 / 4^{\prime \prime} & \text { " } & \text { " } \\ \mathrm{X}- & " & 1 " & \text { " } & \text { " } \\ \text { 1" }\end{array}$
U-Denotes Long
Note: Unless one of the letters below is used, opening is Double Hexagon (12 point).
H -Denotes Hexagon ( 6 point) opening.
S-Denotes Square (8 point) opening.
The numbers following the code letters for type of tool are equal to the size across flats in 32 nds of an inch.

## Examples:

A20-1/2" Drive, 12 Point
$5 / 8$ opening $20 / 32=5 / 8$
AH20-1/2" Drive, 6 Point
$5 / 8$ opening $20 / 32=5 / 8$
T20-3/8" Drive, 12 Point
$5 / 8$ opening $20 / 32=5 / 8$
TH20-3/8" Drive, 6 Point
$5 / 8$ opening $20 / 32=5 / 8$
AS20-1/2" Drive, 8 Point
$5 / 8$ opening $20 / 32=5 / 8$
SOCKET ATTACHMENTS
All attachments carry the drive size identification letter as used for sockets listed above.

| V-1/4" | Sq. Drive |  |
| :---: | :---: | :---: |
| $\mathrm{T}-3 / 8^{\prime \prime}$ | " | " |
| $\mathrm{A}-1 / 2^{\prime \prime}$ | $"$ | $"$ |
| $\mathrm{R}-3 / 4^{\prime \prime}$ | " | a |
| $\mathrm{X}-1 "$ | " | " |

## EXTENSIONS

All extensions are in the 602-617 group.
The last two (2) numbers give the length.

## Examples:

V606 1/4" Sq. Drive, 6" long
T612 3/8" Sq. Drive, $12^{\prime \prime}$ long
EXTENSIONS
X29-X30 exceptions to the above rule.
" X " indicates one inch drive but num-
bers 29 and 30 have no bearing on
actual length.
Wobble Drive Extension (AT) 3/8"
drive series 4-5-31
OTHER ATTACHMENTS

1. Ratchets (V-T-A-R-X)
2. Ratchet Adaptors

4206-4211-4213-4215
4216-4217-4298-4299
(All Drive Sizes)
3. Hinge Handle (V-T-A-R)

1/4" to $3 / 4^{\prime \prime}$ Drive Sizes Series: 720-722-724
4. Sliding "T" Handle (V-T-A-R) $1 / 4^{\prime \prime}$ to $3 / 4^{\prime \prime}$ Drive Sizes Series: 730
5. Speeder Handle (T-A) $3 / 8^{\prime \prime}$ and $1 / 2^{\prime \prime}$ Drives Series: 740-742-744
6. Universal Joint (A-R)
$1 / 2^{\prime \prime}$ and $3 / 4^{\prime \prime}$ Drives
Series: 760
7. Universal Sockets (TU)

3/8" Drive "Universal"
Series: 12-24, 120-200
8. Cross Bar (V-T-A-R-X)

1/4"-3/8"-1/2"-
3/4" Drives
Series: 775
$1^{\prime \prime}$ Drive Series: 31 (X31)
9. Screw Driver Handle (V-T)

1/4"-3/8" Drive Series: 780
10. Screw Driver Handle (Hinge) (V)

1/4" Drive Series: 782
11. Screw Driver Attachment (T) 3/8" Drive Series: 34
12. Drag Link Sockets
(T) 3/8" Drive Series: 27
(A) $1 / 2^{\prime \prime}$ Drive

Series: 785-786-787
13. Crowfeet Attachments
(VF-TC-TF-AC-AF) $1 / 4^{\prime \prime}-3 / 8^{\prime \prime}$ and $1 / 2^{\prime \prime}$ Drive $\mathrm{F}=$ Box Type
$C=$ Open End

## WRENCHES

E-Open End Type
The numbers following the code letters designate the opening of the tool in 32 nds of an inch. Where two (2) openings are involved the smaller one always comes first.
Examples:
E1214-End Wrench $12 / 32 \times 14 / 32=3 / 8^{\prime \prime} \times 7 / 16^{\prime \prime}$
Combination Wrenches-
1100 Series
Box End Wrenches-2800 Series
Service Wrenches-
1200 \& 1900 Series
INDUSTRIAL WRENCHES
All industrial tools are coded by num-
ber only without prefix.
Box Wrenches (Striking Face)
Series: 8800-8817
Structural Wrenches (Box) Series: 8900-8916
Construction Wrenches (O.E.) Series: 200-212
Structural Wrenches (Box)
Series: 900-912
Check-Nut Wrenches (Single Head) Series: 600-610
Check-Nut Wrenches
(Double Head)
Series: 623-640
Set Screw Wrenches (Double Head) 525-543
"T" Handle Wrenches ( 4 and 6 Pt .) Series: 960-978
Offset Handle Wrenches ( 4 and 6 Pt .) Series: 261-278
Pin Spanner Wrenches Series: 450-468

Here is a quick reference chart showing the various openings of wrenches and sockets and the standard bolt heads, screw heads and nuts they fit. Measurements are given in inches.

| NUTS |  |  |  | BOLTS AND SCREWS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thread Dia. of Bolt, Nut or Screw | Finished Hex. Castle, Hex. Slotted, Hex. Jam | Reg. Square, Hex. Jam, Semi-finished Hex. Slotted | Machine <br> Screw \& Stove Bolt Nuts | Hex. Cap Screws | Heavy Bolts: Finished Hex. \& Semifinished Hex. | Lag Bolts: Square | Set Screws: Square |
| \# 0 \& 1 |  |  | 5/32 |  |  |  |  |
| \# 2 \& 3 |  |  | 3/16 |  |  |  |  |
| \#4 |  |  | 1/4 |  |  |  | 1/4 |
| \# 5 \& 6 |  |  | 5/16 |  |  |  | 5/16 |
| \#8 |  |  | 11/32 |  |  |  |  |
| \#10 |  |  | 3/8 |  |  | 9/32 | 3/16 |
| \#12 | 1/4 |  | 7/16 | 1/4 |  |  | 7/32 |
| 1/4" | 7/16 | 7/16 | 7/16 | $\dagger 3 / 8-7 / 16$ |  | 3/8 | 1/4 |
| $5 / 16^{\prime \prime}$ | 1/2 | 9/16 | 9/16 | 1/2 |  | 1/2 | 5/16 |
| 3/8" | 9/16 | 5/8 | 5/8 | 9/16 |  | 9/16 | 3/8 |
| 7/16" | 11/16 | 3/4 |  | 5/8 |  | 5/8 | 7/16 |
| $1 / 2^{\prime \prime}$ | 3/4 | 13/16 |  | 3/4 | 7/8 | $3 / 4$ | 1/2 |
| $9 / 16^{\prime \prime}$ | 7/8 | 7/8 |  | 13/16 |  |  | 9/16 |
| 5/8" | 15/16 | 1 |  | 15/16 | 1-1/16 | 15/16 | 5/8 |
| 3/4" | 1-1/8 | 1-1/8 |  | 1-1/8 | 1-1/4 | 1-1/8 | 3/4 |
| 7/8 ${ }^{\prime \prime}$ | 1-5/16 | 1-5/16 |  | 1-5/16 | 1-7/16 | 1-5/16 | 7/8 |
| 1 " | 1-1/2 | 1-1/2 |  | 1-1/2 | 1-5/8 | 1-1/2 | 1 |
| 1-1/8 ${ }^{\prime \prime}$ | 1-11/16 | 1-11/16 |  | 1-11/16 | 1-13/16 | 1-11/16 | 1-1/8 |
| 1-1/4" | 1-7/8 | 1-7/8 |  | 1-7/8 | 2 | 1-7/8 | 1-1/4 |
| 1-3/8 ${ }^{\prime \prime}$ | 2-1/16 | 2-1/16 |  | 2-1/16 | 2-3/16 |  | 1-3/8 |
| 1-1/2 ${ }^{\prime \prime}$ | 2-1/4 | 2-1/4 |  | 2-1/4 | 2-3/8 |  | 1-1/2 |
| 1-5/8 ${ }^{\prime \prime}$ | 2-7/16 | 2-7/16 |  | 2-7/16 | 2-9/16 |  |  |
| 1-3/4 ${ }^{\prime \prime}$ | 2-5/8 | 2-5/8 |  | 2-5/8 | 2-3/4 |  |  |
| 1-7/8 ${ }^{\prime \prime}$ | 2-13/16 | 2-13/16 |  | 2-13/16 | 2-15/16 |  |  |
| $2^{\prime \prime}$ | 3 | 3 |  | 3 | 3-1/8 |  |  |
| 2-1/4" | 3-3/8 | 3-3/8 |  | 3-3/8 | 3-1/2 |  |  |
| 2-1/2" | 3-3/4 | 3-3/4 |  | 3-3/4 | 3-7/8 |  |  |
| 2-3/4" | 4-1/8 | 4-1/8 |  | 4-1/8 | 4-1/4 |  |  |
| $3{ }^{\prime \prime}$ | 4-1/2 | 4-1/2 |  | 4-1/2 | 4-5/8 |  |  |

4- and 8-Point Sockets are used on Square Bolt Heads, Nuts and Screw Heads.
6 - and 12-Point Sockets are used on Hexagon Bolt Heads, Nuts and Screw Heads.
$\dagger$ Regular Square Bolts Only.

| Adaptors | Sec | Pg. | Double Offset Box | Sec. | Pg. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1/4" Drive |  |  | Wrenches | 2 | 7-8 |
| 1/4" $8^{\prime \prime}$ Drive | 1 | 12 | Drag Link Sockets | 2 | $7-8$ $12+18$ |
| 1/2" Drive | 1 | 18 | Electrical Wrenches | 2 | 3 |
| 3/4" Drive | 1 | 21 | Extra Deep Sockets |  |  |
| $1^{\prime \prime}$ Drive | 1 | 23 | 1/4" Drive .......... | 1 | 2 |
| Adjustable Wrenches | 2 | 15 | $3 / 8{ }^{\prime \prime}$ Drive | 1 | 7 |
| Adjustable Wood |  |  | $1 / 2^{\prime \prime}$ Drive | 1 | 15 |
| File Handle | 7 | 2 | $3 / 4{ }^{\prime \prime}$ Drive | 1 | 20 |
| Allen Keys (Set N5R) | 16 | 15 | Extra-Small Box Wrenches | 2 | 8 |
| Attachments for Sockets. (See Socket Attachments) | ) 1 | 1-23 | Extractors, Screw, Ser. Set | 10 | 8 |
| Body \& Fender Tools | - 8 | 1-3 | Feeler Gauges | 10 | 2-3 |
| Boxes, Tool | 18 | 1-2 | Files \& Holders, Body \& |  |  |
| Box Wrenches |  |  | Fender | 8 | 2 |
| $15^{\circ}$ Angle | 2 | 9 | Flare Nut Wrenches | 2 | 13 |
| Carbon | 13 | 2-7 | Flaring Tool | 11 | , |
| Combination | 2 | 10-11 | Foot Rule | 10 | 3 |
| Double Offset ...... | 2 | 7-8 | Gauges, Feeler | 10 | 2-3 |
| Extra Small | 2 | $8+12$ | Gear Pullers | 9 | 1-3 |
| Heavy Duty Ind. | 13 | 1-8 | Hack Saw and Blades | 7 | 3 |
| Long, One End Offset | 2 | 10 | Hammers |  |  |
| Single Hexagon | 2 | 9 | Ball Pein | 6 | 3 |
| Slotted | 2 | 14 | Body and Fender | 9 | 3 |
| Striking Face | 13 | 1 | Bumping Hammers | 9 | 3 |
| Brake Spring Plier | 10 | 1 | Claw | 6 | 3 |
| Brake Tools | 2 | 14 | Dinging Hammer | 9 | 3 |
| Bushing Driver Set | 10 | 1 | Cross Pein Hammer | 6 | 3 |
| "C" Clamps | 14 | 1 | Pick Hammer | 8 | 3 |
| Cabinets | 18 | 3-4 | Rubber Mallet | 6 | 3 |
| Camber Wrenches (N8) | 16 | 15 | Soft Face | 6 | 3 |
| Carbon Scraper | 10 | 5 | Tire and Rim | 6 | 3 |
| Carbon Steel Tools |  |  | Upholsterer's Magnetic | 8 | 3 |
| Box Wrenches | 13 | 1 | Hub Puller | 9 | 3 |
| Check Nut Wrenches | 13 | 5 | Holding Tools | 10 | 5 |
| Construction Wrenches | 13 | 2 | Ignition Files | 7 | 2 |
| Offset Socket Wrenches | 13 | 7 | Ignition Wrenches | 2 | 12 |
| Open End Wrs. Sing. | 13 | 3 | Impact Sockets | 12 | 2 |
| Open End Wrs. Dbl. | 13 | 4 | Kerotest Packing Gland |  |  |
| Pin Spanners | 13 | 8 | Kerotest Packing Gland Socket | 11 | 3 |
| Set Screw Wrenches | 13 | 5 | Knife, Shop | 10 |  |
| Structural Wrenches | 13 | 1-2 | Knife, Shop Rolls |  | 5-6 |
| "T"' Socket Wrenches | 13 | 6 | Leatherette Rolls | 18 | 5-6 |
| Chart of Openings for |  |  | Magnetic Holding Tool | 10 | 5 |
| Bolts \& Nuts See F | Front | atalog | Manifold Wrenches | 2 | 14 |
| Check Nut Wrenches, |  |  | Metal Snips | 5 | 4 |
| Carbon | 13 | 5 | Metric Tool Sets | 15 | 3 |
| Chests (Metal) | 18 | 3 | Metric Wrenches Sockets | 15 | 1-3 |
| Chevrolet Special |  |  | Miniature Wrenches | 2 | -3 |
| Wrenches Chisels | 2 | r 6 | Offset Socket Wrenches, | 13 | 3 |
| Chisel Set | 16 | 18 | Carbon | 13 | 7 |
| Combination Box \& Open |  |  | Open End Wrenches |  |  |
| End Wrenches |  |  | $15^{\circ}$ Angle | 2 | 2 |
| Streamlined | 2 | 10-11 | Adjustable | 2 | 15 |
| Compressors, Piston Ring | 10 | 5 | Carbon | 13 | 2-5 |
| Connecting Rod Sockets, Special | 1 | 18 | Combination Box \& Open End | 2 | 10-11 |
| Construction Wrenches, |  |  | Electrical | 2 | 3 |
| Carbon | 13 | 2 | Ignition | 12 | 12 |
| Crow Foot Attachments |  |  | Long | 2 | 2 |
| 1/4" Drive | 1 | 4 | Miniature | 2 | 3 |
| $3 / 8{ }^{\prime \prime}$ Drive | 1 | 9 | Right Angle | 2 | 4 |
| 1/2" Drive | 1 | 16-17 | Service | 2 | 5-6 |
| Cylinder Head Wrenches | 2 | 13 | Streamlined | 2 | 2 |
| Distributor Wrench | 2 | 14 | Packing Gland Sockets | 11 | 3 |
| Dolly Blocks | 8 | 1 | Pick-Up Tool | 10 | 5 |


|  | Sec. | Pg. |
| :---: | :---: | :---: |
| Pin Spanners, Carbon | 13 | 8 |
| Pinch-Off Tool . | 11 |  |
| Pipe Wrenches | 2 | 15 |
| Piston Ring Compressors | 10 | 5 |
| Piston Ring Groove |  |  |
| Cleaner | 10 | 5 |
| Pliers |  |  |
| Battery | 5 | 2 |
| Bent Needle Nose | 5 | 3 |
| Brake Spring | 10 | 1 |
| Chain Nose | 5 | 4 |
| Combination | 5 | 2 |
| Diagonal, Cutting | 5 | 2 |
| Duck Bill | 5 | 4 |
| Flat Nose | 5 | 2 |
| Hog Ring | 5 | 3 |
| Hose Clamp | 5 | 3 |
| Ignition | 5 | 4 |
| Lineman's | 5 | 2 |
| Lock Ring | 5 | 2 |
| Long Nose | 5 | 3 |
| Pump | 5 | 4 |
| Slip Joint | 5 | 2-3 |
| Thin Bent Nose | 5 | 3 |
| Wiring | 5 | 3 |
| Plier Wrenches | 5 | 4 |
| Point Files | 7 | 2 |
| Power Sockets | 12 | 2 |
| Power Adaptors | 12 | 3 |
| Power Extensions | 12 | 3 |
| Pry Bars | 6 | 2 |
| Pullers, Gear, Others |  |  |
| Adaptor | 9 | 3 |
| Hub | 9 | 3 |
| Punches | 6 | 2 |
| Punch and Chisel Set | 16 | 18 |
| Putty Knife | 10 | 3 |
| Ratchets | , | $5+11+19$ |
| (See Socket Attachments) |  | $21+23$ |
| Ratchets, Refrigeration | 11 |  |
| Ratchet Plug Adaptors | 11 | 3 |
| Refrigeration Special Tools | 11 | 1-3 |
| Refrigeration Tool Sets | 16 | 20 |
| Retainer Pins (Industrial Brochure) |  |  |
| Right Angle Wrenches | 2 | 4 |
| Rim Wrenches | 10 | , |
| Roller Cabinets | 18 | 3-4 |
| Rolls, Leatherette | 18 | 5-6 |
| Screw Drivers |  |  |
| Adjusting |  |  |
| Clutch Head | 4 |  |
| Electricians | 4 | 2 |
| Neon Tube | 4 | 2 |
| Offset Screw Drivers |  |  |
| (Set 0672) | 16 | 14 |
| Phillips | 4 | 2 |
| Round Shank | 4 | 2 |
| Starters, Holding | 10 |  |
| Socket Wrench Type | 2 | 4 |
| Square Shank | 4 | 2 |
| Screw Starters | 10 | 1 |
| Service Wrenches | 2 | 5-6 |
| Set Screw Wrenches, |  |  |
| Carbon | 13 |  |
| Single Head Wrenches | 1 | 1-23 |

## YOU'LL FIND THEM HERE



## SOCKETS-HANDLES <br> ATTACHMENTS <br> $1 / 4^{\prime \prime}-3 / 8^{\prime \prime}-1 / 2^{\prime \prime}-1^{\prime \prime}$ DRIVE

| WRENCHES OPEN END-BOX COMBINATION | 2 |
| :---: | :---: |
| TORQUE WRENCHES FORMULA-DESCRIPTION | 3 |
| SCREWDRIVERS WOOD-PLASTIC | 4 |
| PLIERS <br> TECHNICAL DATA | 5 |
| HAMMERS CHISELS-PUNCHES | 6 |
| HACK SAWS AND FILES | 7 |
| BODY AND FENDER TOOLS | 8 |
| GEAR PULLERS AND SEPARATORS | $\bigcirc$ |
| TOOLS FOR MISC. REQUIREMENTS | 10 |
| REFRIGERATION <br> \& AIR CONDITIONING |  |

POWER AND
IMPACT SOCKETS
HEAVY DUTY 13
WRENCHES
"C" CLAMPS 14

## WHITWORTH AND METRIC TOOLS

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TOOL SETS

AUTOMATIC TRANSMISSION TOOLS

CABINETS
ROLLS-BOXES

\section*{Backed by a Factory Guarantee . . .}

Over 80 years of progress has made Bonner a leader in the tool industry. The broad line of tools produced in this plant are backed by a factory guarantee to the user.

\section*{"GUARANTEE"}
 ally inspected before defects in workman road required. guaranteed against dine on the work load or ep coed repepiried Defective Bonny \(T\) Free replacement cannot be made any purpose shows that tools have been used have been designed, or if they show normal wear. All Bonney Tools must be returned to the fact for ex
in All with prepaid, made. 2400 ROCKHILL ROAD

TOOL WORKS


\section*{Highest Zuality . . . Alloy Steel}

You can actually "feel" the quality in Bonney sockets. Only the finest materials are used to assure long life and accurate performance for the benefit of the ultimate user. Over the years, Bonney has proven their "know how" in producing sockets that fit the job. Pictured below are sockets from 4 point to 12 point available in the Bonney line.


4 Point


6 Point


8 Point


12 Point


\section*{REGULAR...}

To understand deep and regular sockets we have illustrated each of these. The regular (short) type is used most commonly.

\section*{DEEP ..}

The deep socket (long) is used where a deep throat is necessary for bolt clearance.
Deep
Socket

\section*{HANDLES AND ATTACHMENTS}

In addition to the above sockets offered in all five drives sizes \(1 / 4-3 / 8-1 / 2-3 / 4\) and 1 inch square drives, Bonney also offers a complete range of handles and attachments in the same five drive sizes (see page 2 of this section).

IF THE TOOL FITS THE JOB . . .

Bonney offers a complete line of handles and attachments from \(1 / 4^{\prime \prime}\) drive through \(1^{\prime \prime}\) drive. Below you will find a brief description of a few of these handles and attachments.

\section*{DRAG LINK SOCKETS}


Designed for special drag link adjustments on many passenger cars and trucks. Made for dependable service and accurate adjustments.

\section*{SCREWDRIVER ATTACHMENTS}

This screwdriver blade attachment comes in the popular drive sizes. Convenient for hard to reach applications.

\section*{WOBBLE DRIVE EXTENSIONS}


Designed for work in close quarters, enables the mechanic to obtain a small amount of swivel without the use of a universal joint. This tool does not carry a guarantee because of the unusual shape of the male end making it suitable for light duty work only.

\section*{SCREWDRIVER HANDLE}

Available in popular sizes for use with many attachments. Provides a "universal" feature.

\section*{SPARK PLUG SOCKET}


This handy spark plug socket features a spark plug retainer enabling the mechanic to remove and replace spark plugs without the danger of dropping the plug causing serious damage.

\section*{ADAPTORS}


These adaptors enable the mechanic to use tools on hand with attachments of a different drive size.

\section*{CROSS HANDLES}

Made of high grade metal for extra strength when using added power for tightening or loosening stubborn bolts and nuts.

\section*{CROWFOOT ATTACHMENTS}

Bonney Crowfoot wrenches are indispensable to torque wrench adjustments in obtaining specified torque. Designed specifically to perform unusual applications, sturdy construction for better service.

\section*{QUALITY MATERIAL AND WORKMANSHIP}

Bonney sockets are made of only the finest select steel incorporated with skilled craftsmanship and modern machinery. All sockets are made to exacting specifications and must meet highest standards in the Industry. Bonney sockets are available in a complete range of drive sizes and openings.

> FOR ADDED CONVENIENCE, ALL THREE STYLES OF SOCKETS ARE SHOWN ALONG WITH ALL NECESSARY MEASUREMENTS INDICATED.


\section*{Technical Data}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Opening & Part No. & \[
\begin{gathered}
\text { Length } \\
(\mathrm{L}) \\
\hline
\end{gathered}
\] & Bolt
Clearance
(D) & Socket End O.D. (A) & Drive
End 0.D.
(B) & Nose Length (E) & \[
\begin{gathered}
\text { Weigh } \\
\text { Lbs. }
\end{gathered}
\] \\
\hline
\end{tabular}

TWELVE-POINT OPENINGS - REGULAR LENGTH
\begin{tabular}{cllccccc}
\hline \(3 / 16\) & V6 & \(7 / 8\) & \(1 / 4\) & \(19 / 64\) & \(1 / 2\) & \(1 / 2\) & .022 \\
\hline \(7 / 32\) & V7 & \(7 / 8\) & \(9 / 32\) & \(11 / 32\) & \(1 / 2\) & \(1 / 2\) & .025 \\
\hline \(1 / 4\) & V8 & \(7 / 8\) & \(9 / 32\) & \(3 / 8\) & \(1 / 2\) & \(1 / 2\) & .025 \\
\hline \(9 / 32\) & V9 & \(7 / 8\) & \(9 / 32\) & \(13 / 32\) & \(1 / 2\) & \(1 / 2\) & .025 \\
\hline \(5 / 16\) & V10 & \(7 / 8\) & \(9 / 32\) & \(29 / 64\) & \(1 / 2\) & \(1 / 2\) & .025 \\
\hline \(11 / 32\) & V11 & \(7 / 8\) & \(9 / 32\) & \(1 / 2\) & - & - & .028 \\
\hline \(3 / 8\) & V12 & \(7 / 8\) & \(9 / 32\) & \(17 / 32\) & - & - & .028 \\
\hline \(7 / 16\) & V14 & \(7 / 8\) & \(9 / 32\) & \(5 / 8\) & - & - & .047 \\
\hline \(1 / 2\) & V16 & \(7 / 8\) & \(21 / 64\) & \(11 / 16\) & - & - & .050 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641B-Type 1-Class 1-1/4" Drive.
EIGHT-POINT OPENINGS - REGULAR LENGTH
\begin{tabular}{lllrrrrl}
\hline \(1 / 4\) & VS8 & \(7 / 8\) & \(9 / 32\) & \(29 / 64\) & \(1 / 2\) & \(1 / 2\) & .028 \\
\hline \(5 / 16\) & VS10 & \(7 / 8\) & \(5 / 16\) & \(9 / 16\) & - & - & .038 \\
\hline \(3 / 8\) & VS12 & \(7 / 8\) & \(3 / 8\) & \(21 / 32\) & - & - & .055 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641B-Type 1-Class 1-1/4" Drive.
TWELVE-POINT OPENINGS - DEEP
\begin{tabular}{cllccccc|}
\hline \(3 / 16\) & VL6 & 2 & \(1 / 4\) & \(19 / 64\) & \(1 / 2\) & \(1-5 / 8\) & .034 \\
\hline \(7 / 32\) & VL7 & 2 & \(9 / 32\) & \(11 / 32\) & \(1 / 2\) & \(1-5 / 8\) & .038 \\
\hline \(1 / 4\) & VL8 & 2 & \(9 / 32\) & \(3 / 8\) & \(1 / 2\) & \(1-5 / 8\) & .041 \\
\hline \(9 / 32\) & VL9 & 2 & \(9 / 32\) & \(27 / 64\) & \(1 / 2\) & \(1-5 / 8\) & .044 \\
\hline \(5 / 16\) & VL10 & 2 & \(5 / 16\) & \(29 / 64\) & \(1 / 2\) & \(1-5 / 8\) & .050 \\
\hline \(11 / 32\) & VL11 & 2 & \(11 / 32\) & \(1 / 2\) & \(1 / 2\) & - & .059 \\
\hline \(3 / 8\) & VL12 & 2 & \(3 / 8\) & \(17 / 32\) & \(17 / 32\) & - & .066 \\
\hline \(7 / 16\) & VL14 & 2 & \(7 / 16\) & \(5 / 8\) & \(5 / 8\) & - & .094 \\
\hline \(1 / 2\) & VL16 & 2 & \(1 / 2\) & \(11 / 16\) & \(11 / 16\) & - & .109 \\
\hline
\end{tabular}

\footnotetext{
Ref.: Fed. Spec. GGG-W-641B-Type 1-Class 2-1/4" Drive.
}

VL6
THRU VLIO
\begin{tabular}{cccccccc}
\hline Opening & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & Length & \multicolumn{2}{c}{\begin{tabular}{c} 
Diameter (O.D.) \\
Head \\
Drive End
\end{tabular}} & \begin{tabular}{c} 
Head \\
Thkns.
\end{tabular} & \begin{tabular}{c} 
Slotted \\
Opening
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline \(3 / 16\) & VF 6 & \(7 / 8\) & \(3 / 8\) & \(15 / 32\) & \(1 / 4\) & \(1 / 8\) & .093 \\
\hline \(7 / 32\) & VF 7 & \(7 / 8\) & \(3 / 8\) & \(15 / 32\) & \(1 / 4\) & \(5 / 32\) & .062 \\
\hline \(\mathbf{1 / 4}\) & VF 8 & \(7 / 8\) & \(1 / 2\) & \(1 / 2\) & \(1 / 4\) & \(3 / 16\) & .109 \\
\hline \(9 / 32\) & VF 9 & \(7 / 8\) & \(1 / 2\) & \(1 / 2\) & \(1 / 4\) & \(7 / 32\) & .100 \\
\hline \(5 / 16\) & VF10 & \(7 / 8\) & \(1 / 2\) & \(1 / 2\) & \(1 / 4\) & \(1 / 4\) & .096 \\
\hline \(11 / 32\) & VF11 & \(7 / 8\) & \(1 / 2\) & \(1 / 2\) & \(1 / 4\) & \(9 / 32\) & .093 \\
\hline \(3 / 8\) & VF12 & \(7 / 8\) & \(9 / 16\) & \(15 / 32\) & \(17 / 32\) & \(9 / 32\) & .025 \\
\hline \(7 / 16\) & VF14 & 1 & \(21 / 32\) & \(15 / 32\) & \(19 / 32\) & \(11 / 32\) & .028 \\
\hline \(1 / 2\) & VF16 & \(1-1 / 8\) & \(3 / 4\) & \(15 / 32\) & \(19 / 32\) & \(3 / 8\) & .047 \\
\hline \(9 / 16\) & VF18 & \(1-3 / 16\) & \(13 / 16\) & \(15 / 32\) & \(19 / 32\) & \(7 / 16\) & .044 \\
\hline
\end{tabular}

Fed. Spec. GGG-W-641B, Type 2, Class 1.

\section*{BONNEY CROWFOOT ATTACHMENTS}
- Aircraft fittings
- Excellent for tubing fittings
- Attachments for torque wrenches
- Designed for the unusual request
- Complete range of sizes

On the following pages you will find other attachments and handles which round out the Bonney line. is made of the finest select steel made to exacting specifications to give long and dependable service for the mechanic and repairman. Length: 5 inches. Weight: . 187 lbs. Fed. Spec.: GGG-W-641B, Type 6, Class 1.

\section*{*V707 RATCHET - \(1 / 4\) INCH DRIVE(SEALED HEAD)}

Positive movement in both the "engage" and "reverse" positions with the convenient thumb tip reversing button. The Pawl action is so designed to divert the load away from the teeth giving a smooth, quiet, positive movement with minimum fatigue. Exhaustive tests have proven satisfactory operation indefinitely, beyond normal work loads without fatigue, failure and without the danger of slippage!
(Patent pending.) V707-Length: 5 inches. Weight: 187 lbs.
EXTENSIONS -2 INCH AND 6 INCH. \(1 / 4\) INCH SQUARE DRIVE These Bonney Extensions enable the mechanic to reach into hard to get at places where socket action is desired. Made of the finest grade steel with polished heads finished in nickel chrome. V602 - Length: 2 inches. Weight: 050 lbs. V606-Length: 6 inches. Weight: . 122 lbs. Fed. Spec.: GGG-W-641B, Type 13, Class 1.

\section*{HINGE HANDLE \(1 / 4\) INCH SQUARE DRIVE}

The V720 Bonney Hinge Handle is designed to allow working at angles where it is necessary to by-pass obstructions. In many cases, a straight Extension cannot be used because of such obstructions. V720 - Length: 5-3/4 inches. Weight: . 203 lbs. Fed. Spec.: GGG-W-641B, Type 5.

\section*{SCREWDRIVER HANDLE ATTACHMENT - \(1 / 4\) INCH SQUARE DRIVE}

The V780 Attachment allows the mechanic to "spin tight" sockets when not accessible due to obstructions. This handle can also be used to remove sockets in tight places after initial loosening. V780 - Length: 6 inches. Weight: 118 lbs. Fed. Spec.: GGG-W-641B, Type 7, Class 3.

\section*{SLIDING "T" HANDLE - \(1 / 4\) INCH SQUARE DRIVE}

This "T" Handle part no. V730 allows tightening or loosening with socket application using either extreme of the Sliding Handle. This is extremely handy when an Extension cannot be used due to overhead obstructions. V730-Length: 4 inches. Weight: 084 lbs. Fed. Spec.: GGG-W-641B, Type 8, Class 1.

\section*{ADAPTOR - \(1 / 4\) INCH TO \(3 / 8\) INCH SQUARE DRIVE}

These Adaptors make it possible to use either \(3 / 8^{\prime \prime}\) or \(1 / 4^{\prime \prime}\) sockets with opposite drive size attachments. 4216 - Female Drive \(3 / 8^{\prime \prime}\) - Male Drive \(1 / 4^{\prime \prime}\). Weight: . 031 lbs. 4217 - Female Drive 1/4" - Male Drive 3/8". Weight: . 034 lbs. Fed. Spec.: GGG-W-641B. Type 2, Class 1.

\section*{SCREWDRIVER HINGE HANDLE V782}

This tool allows the mechanic to work at any angle in hard to reach spots. V782 - Length: 4-3/4 inches. Weight . 020 lbs.

\section*{DISTRIBUTOR TERMINAL ATTACHMENT- \(1 / 4\) INCH SQUARE DRIVE} The V36 Attachment designed for Ford-Chevrolet Distributor and Dashboard. V36 - Length: 1-3/8 inches. Weight: . 038 lbs.

\section*{CROSS BAR}

Used with Hinge Handle for added force. The V775 Cross Bar is used when added leverage is needed for tightening or loosening nuts and bolts. V775 - Length: 3-1/2 inches. Weight: . 025 lbs.

The \(3 / 8^{\prime \prime}\) square drive sockets shown on the following pages are manufactured from the finest materials available and made to exacting specifications to assure close fit for all applications. All Bonney sockets are nickel chrome plated for added beauty and lasting quality.


Technical Dafa


T16 THRU T22

T24 THRU T128
\begin{tabular}{lccccccc}
\hline \multirow{3}{*}{ Opening } & Part & Length & Bolt & Socket & Drive & Nose \\
& Clearance & End O.D. & End 0.D. & Length & Weight \\
& No. & (L) & (D) & (A) & (B) & (E) & Lbs. \\
\hline
\end{tabular}

\section*{TWELVE-POINT OPENINGS - REGULAR LENGTH}
\begin{tabular}{cclccccc}
\hline \(5 / 16\) & T10 & 1 & \(9 / 32\) & \(29 / 64\) & \(21 / 32\) & \(1 / 2\) & .038 \\
\hline \(3 / 8\) & T12 & 1 & \(9 / 32\) & \(17 / 32\) & \(21 / 32\) & \(1 / 2\) & .069 \\
\hline \(7 / 16\) & T14 & 1 & \(9 / 32\) & \(39 / 64\) & \(21 / 32\) & \(1 / 2\) & .044 \\
\hline \(1 / 2\) & T16 & 1 & \(21 / 64\) & \(11 / 16\) & - & - & .050 \\
\hline \(9 / 16\) & T18 & 1 & \(21 / 64\) & \(25 / 32\) & - & - & .069 \\
\hline \(19 / 32\) & T19 & 1 & \(21 / 64\) & \(13 / 16\) & - & - & .075 \\
\hline \(5 / 8\) & T20 & 1 & \(21 / 64\) & \(27 / 32\) & - & - & .084 \\
\hline \(11 / 16\) & T22 & 1 & \(11 / 32\) & \(59 / 64\) & - & - & .103 \\
\hline \(3 / 4\) & T24 & \(1-7 / 32\) & \(7 / 16\) & 1 & \(11 / 16\) & \(11 / 32\) & .109 \\
\hline \(25 / 32\) & T25 & \(1-7 / 32\) & \(7 / 16\) & \(1-1 / 32\) & \(23 / 32\) & \(11 / 32\) & .125 \\
\hline \(13 / 16\) & T26 & \(1-7 / 32\) & \(15 / 32\) & \(1-1 / 16\) & \(3 / 4\) & \(11 / 32\) & .125 \\
\hline \(7 / 8\) & T128 & \(1-9 / 32\) & \(1 / 2\) & \(1-5 / 32\) & \(3 / 4\) & \(11 / 32\) & .150 \\
\hline & & SIX-POINT & OPENINGS & - REGULAR LENGTH & & \\
\hline \(1 / 4\) & TH8 & 1 & \(1 / 4\) & \(3 / 8\) & \(21 / 32\) & \(1 / 2\) & .044 \\
\hline \(5 / 16\) & TH10 & 1 & \(9 / 32\) & \(29 / 64\) & \(21 / 32\) & \(1 / 2\) & .038 \\
\hline \(3 / 8\) & TH12 & 1 & \(9 / 32\) & \(17 / 32\) & \(21 / 32\) & \(1 / 2\) & .069 \\
\hline \(7 / 16\) & TH14 & 1 & \(9 / 32\) & \(39 / 64\) & \(21 / 32\) & \(1 / 2\) & .044 \\
\hline \(1 / 2\) & TH16 & 1 & \(21 / 64\) & \(11 / 16\) & - & - & .050 \\
\hline \(9 / 16\) & TH18 & 1 & \(21 / 64\) & \(25 / 32\) & - & - & .069 \\
\hline \(5 / 8\) & TH20 & 1 & \(21 / 64\) & \(27 / 32\) & - & - & .084 \\
\hline \(11 / 16\) & TH22 & 1 & \(11 / 32\) & \(59 / 64\) & - & - & .103 \\
\hline \(3 / 4\) & TH24 & \(1-7 / 32\) & \(7 / 16\) & 1 & \(11 / 16\) & \(11 / 32\) & .109 \\
\hline \(13 / 16\) & TH26 & \(1-7 / 32\) & \(15 / 32\) & \(1-1 / 16\) & \(3 / 4\) & \(11 / 32\) & .125 \\
\hline \(7 / 8\) & TH28 & \(1-9 / 32\) & \(1 / 2\) & \(1-5 / 32\) & \(3 / 4\) & \(11 / 32\) & .150 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641B-Type 1-Class 1-3/8" Drive.
Both 12 pt. and 6 pt. sockets shown above are made to Bonney specifications with the ultimate use in mind. Attachments for all of the sockets on these two pages are illustrated through pages 11 and 12.

Shown below are both 4 pt. and 8 pt. sockets made to meet specific demands. Bonney offers this wide selection to satisfy the various applications confronted by the everyday mechanic.

\section*{Technical Data}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Opening & \[
\begin{aligned}
& \text { Part } \\
& \text { No. }
\end{aligned}
\] & Length
(L) & Bolt
Clearance
(D) & Socket
End O.D.
(A) & Drive
End 0.D.
(B) & Nose Length (E) & Weight Lbs. \\
\hline \multicolumn{8}{|c|}{FOUR-POINT OPENINGS - REGULAR LENGTH} \\
\hline 9/32 & TS9 & 1 & 9/32 & 17/32 & 21/32 & 1/2 & 044 \\
\hline \multicolumn{8}{|c|}{EIGHT-POINT OPENINGS - REGULAR} \\
\hline 3/8 & TS12 & 1 & 1/4 & 11/16 & - & - & . 062 \\
\hline 7/16 & TS14 & 1 & 9/32 & 25/32 & - & - & . 078 \\
\hline 1/2 & TS16 & 1 & 21/64 & 27/32 & - & - & . 103 \\
\hline 9/16 & TS18 & 1-7/32 & 21/64 & 1 & 11/16 & 11/32 & . 141 \\
\hline 5/8 & TS20 & 1-7/32 & 21/64 & 1-1/16 & 3/4 & 11/32 & . 159 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641B--Type 1-Class 1-3/8" Drive.
The 6 pt . deep sockets illustrated below are offered in openings from \(3 / 8^{\prime \prime}\) to \(7 / 8^{\prime \prime}\) to fit many of the specific jobs and special applications.

Technical Data
SIX-POINT OPENINGS - DEEP
\begin{tabular}{cclccccc}
\hline \(3 / 8\) & T 120 & \(1-3 / 4\) & \(3 / 8\) & \(17 / 32\) & \(21 / 32\) & \(1-1 / 4\) & .063 \\
\hline \(7 / 16\) & T 140 & 2 & \(7 / 16\) & \(39 / 64\) & \(21 / 32\) & \(1-1 / 2\) & .078 \\
\hline \(1 / 2\) & T 160 & 2 & \(7 / 16\) & \(11 / 16\) & - & - & .097 \\
\hline \(9 / 16\) & T 180 & 2 & \(15 / 32\) & \(25 / 32\) & - & - & .134 \\
\hline \(5 / 8\) & T 200 & \(2-1 / 4\) & \(15 / 32\) & \(27 / 32\) & - & - & .192 \\
\hline \(11 / 16\) & T 220 & \(2-1 / 2\) & \(1 / 2\) & \(59 / 64\) & - & - & .222 \\
\hline \(3 / 4\) & T 240 & \(2-1 / 2\) & \(1 / 2\) & 1 & - & - & .263 \\
\hline \(13 / 16\) & T 260 & \(2-1 / 2\) & \(1 / 2\) & \(1-1 / 16\) & - & - & .269 \\
\hline \(7 / 8\) & T 280 & \(2-1 / 2\) & \(9 / 16\) & \(1-5 / 32\) & - & - & .347 \\
\hline
\end{tabular}

Shown below are the 12 point deep sockets in the \(3 / 8^{\prime \prime}\) drive. These sockets are especially designed for applications where bolts protrude beyond the nut and also where access is difficult with the short series socket. Only the finest materials and handling go into making these sockets dependable and precision fit.

\section*{Technical Data}

\section*{TWELVE-POINT OPENINGS - DEEP}
\begin{tabular}{cclccccc}
\hline \(3 / 8\) & LT12 & \(1 / 3-4\) & \(3 / 8\) & \(17 / 32\) & \(21 / 32\) & \(1-1 / 4\) & .063 \\
\hline \(7 / 16\) & LT14 & 2 & \(7 / 16\) & \(39 / 64\) & \(21 / 32\) & \(1-1 / 2\) & .078 \\
\hline \(1 / 2\) & LT16 & 2 & \(7 / 16\) & \(11 / 16\) & - & - & .097 \\
\hline \(9 / 16\) & LT18 & 2 & \(15 / 32\) & \(25 / 32\) & - & - & .134 \\
\hline \(5 / 8\) & LT20 & \(2-1 / 4\) & \(15 / 32\) & \(27 / 32\) & - & - & .192 \\
\hline \(11 / 16\) & LT22 & \(2-1 / 2\) & \(1 / 2\) & \(59 / 64\) & - & - & .222 \\
\hline \(3 / 4\) & LT24 & \(2-1 / 2\) & \(1 / 2\) & 1 & & - & .263 \\
\hline \(13 / 16\) & LT26 & \(2-1 / 2\) & \(1 / 2\) & \(1-1 / 16\) & - & - & .269 \\
\hline \(7 / 8\) & LT28 & \(2-1 / 2\) & \(9 / 16\) & \(1-5 / 32\) & - & - & .347 \\
\hline \multicolumn{6}{c}{ Ref.: \(F\) Fed. Spec. GGG-W-641B - Type 1-Class \(2-3 / 8^{\prime \prime}\) Drive. } & \\
\hline
\end{tabular}

\section*{BONNEY FLEXIBLE SOCKETS}


Illustrated at the left is the 12 point flexible socket which comes in the popular \(3 / 8\) drive in 7 sizes.

\section*{TU12} THRU TU24


The 6 point flexible socket also in the \(3 / 8\) drive comes in 5 popular sizes.

TU120
THRU
TU200

Illustrated on this page are the Bonney Flexible Sockets in both 6 pt . and 12 pt . openings. Many uses will be found for this type of socket wherein access is difficult with the standard straight socket. These sockets are the finest quality and made to do the job well. The drive square is made to fit the many Attachments found in the Bonney \(3 / 8\) drive line. Openings from \(3 / 8^{\prime \prime}\) to \(3 / 4^{\prime \prime}\) assure any mechanic "THE RIGHT TOOL FOR THE JOB."

Technical Data
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Opening} & \multirow[b]{2}{*}{\[
\begin{aligned}
& \text { Part } \\
& \text { No. }
\end{aligned}
\]} & \multirow[b]{2}{*}{Length} & \multicolumn{5}{|c|}{Diameter} \\
\hline & & & \begin{tabular}{l}
Bolt \\
Clearance
\end{tabular} & Socket End & Drive End & Nose Length & Weight Lbs. \\
\hline \multicolumn{8}{|c|}{SIX-POINT OPENINGS} \\
\hline 3/8 & TU120 & 1-23/32 & 11/32 & 17/32 & 11/16 & 1/4 & . 094 \\
\hline 7/16 & TU140 & 1-23/32 & 9/32 & 39/64 & 11/16 & 11/32 & . 100 \\
\hline 1/2 & TU160 & 1-23/32 & 21/64 & 11/16 & 11/16 & - & . 094 \\
\hline 9/16 & TU180 & 1-3/4 & 21/64 & 25/32 & 11/16 & - & . 100 \\
\hline 5/8 & TU200 & 1-3/4 & 21/64 & 27/32 & 11/16 & - & . 103 \\
\hline \multicolumn{8}{|c|}{TWELVE-POINT OPENINGS} \\
\hline 3/8 & TU12 & 1-23/32 & 11/32 & 17/32 & 11/16 & 1/4 & . 094 \\
\hline 7/16 & TU14 & 1-23/32 & 9/32 & 39/64 & 11/16 & 11/32 & . 100 \\
\hline 1/2 & TU16 & 1-23/32 & 21/64 & 11/16 & 11/16 & - & . 094 \\
\hline 9/16 & TU18 & 1-3/4 & 21/64 & 25/32 & 11/16 & - & . 100 \\
\hline 5/8 & TU20 & 1-3/4 & 21/64 & 27/32 & 11/16 & - & . 103 \\
\hline 11/16 & TU22 & 1-49/64 & 11/32 & 59/64 & 11/16 & 17/32 & . 105 \\
\hline 3/4 & TU24 & 1-7/8 & 7/16 & 1 & 11/16 & 5/8 & . 105 \\
\hline
\end{tabular}

\footnotetext{
Ref.: Fed. Spec. GGG-W-641B, Type 1, Class 3.
}

\section*{OPEN END CROWFOOT ATTACHMENTS}

These wrenches are especially useful as Torque Wrench Attachments where limited space is confronted. Each of the wrenches is precision made to give excellent service in all types of applications. They are particularly useful for Flare Nut connections where standard wrenches cannot be used.

\section*{Technical Data}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Opening} & \multirow[b]{2}{*}{Part No.} & \multirow[b]{2}{*}{Length (L)} & \multicolumn{2}{|l|}{Diameter} & \multicolumn{2}{|l|}{Thickness} & \multirow[t]{2}{*}{Depth of Opening (C)} & \multirow[b]{2}{*}{Weight Lbs.} \\
\hline & & & \begin{tabular}{l}
Head \\
(B)
\end{tabular} & \begin{tabular}{l}
Drive \\
End \\
(W)
\end{tabular} & Head (T) & Drive End (t) & & \\
\hline 3/8 & TC12 & 2-1/16 & 11/16 & 3/4 & 3/8 & 1/2 & 13/32 & . 125 \\
\hline 7/16 & TC14 & 2-1/8 & 7/8 & 3/4 & 3/8 & 1/2 & 1/2 & . 141 \\
\hline 1/2 & TC16 & 2-1/8 & 7/8 & 3/4 & 3/8 & 1/2 & 17/32 & . 134 \\
\hline 9/16 & TC18 & 2-7/32 & 1-1/8 & \(3 / 4\) & \(3 / 8\) & 1/2 & 21/32 & . 144 \\
\hline 5/8 & TC20 & 2-7/32 & 1-1/8 & 3/4 & 3/8 & 1/2 & 45/64 & . 138 \\
\hline 11/16 & TC22 & 2-5/16 & 1-7/16 & 3/4 & 1/2 & 1/2 & 27/32 & . 215 \\
\hline 3/4 & TC24 & 2-5/16 & 1-7/16 & 3/4 & 1/2 & 1/2 & 7/8 & . 200 \\
\hline 13/16 & TC26 & 2-3/8 & 1-21/32 & 3/4 & 1/2 & 1/2 & 31/32 & . 247 \\
\hline 7/8 & TC28 & 2-3/8 & 1-21/32 & \(3 / 4\) & 1/2 & 1/2 & 1 & . 241 \\
\hline
\end{tabular}

\section*{BOX TYPE CROWFOOT ATTACHMENTS}

Much like the above Open End Wrenches, these are especially useful
for working on tubing fittings and other tight applications. Much of the work in the aircraft field is accomplished with this type attachment. When used with Torque Wrenches, specific torques can be obtained. DO NOT USE FOR WORK REQUIRING HEAVY PULL.


Technical Data
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Opening} & \multirow[b]{2}{*}{Part No.} & \multirow[b]{2}{*}{\begin{tabular}{l}
Length \\
(L)
\end{tabular}} & \multicolumn{2}{|l|}{Diameter} & \multicolumn{2}{|l|}{} & \multirow[b]{2}{*}{Weight Lbs.} \\
\hline & & & Head (B) & \begin{tabular}{l}
Drive End \\
(W)
\end{tabular} & Thickness Head (T) & Slotted Opening (C) & \\
\hline 5/8 & TF20 & 1-3/8 & 29/32 & 5/8 & 3/4 & 15/32 & . 081 \\
\hline 11/16 & TF22 & 1-1/2 & 1 & 5/8 & 3/4 & 17/32 & . 078 \\
\hline 3/4 & TF24 & 1-1/2 & 1-3/32 & 5/8 & 25/32 & 9/16 & . 073 \\
\hline 13/16 & TF26 & 1-5/8 & 1-11/64 & 5/8 & 25/32 & 5/8 & . 108 \\
\hline 7/8 & TF28 & 1-5/8 & 1-17/64 & 5/8 & 13/16 & 11/16 & . 125 \\
\hline 15/16 & TF30 & 1-3/4 & 1-11/32 & 5/8 & 13/16 & 23/32 & . 131 \\
\hline 1 & TF32 & 1-7/8 & 1-27/64 & 5/8 & 27/32 & 3/4 & . 133 \\
\hline 1-1/16 & TF34 & 1-7/8 & 1-1/2 & 5/8 & 27/32 & 25/32 & . 141 \\
\hline
\end{tabular}

\footnotetext{
Ref.: Fed. Spec. GGG-W-641B, Type 2, Class 1.
}

\section*{PHILLIPS HEAD - SOCKET HEAD - 3/8 INCH DRIVE}

The TW Series Attachments are used for all popular sizes of set screws and cap screws. Made to assure long life, these bits are replaceable if necessary. The TCL Series is used in close clearance work or where force is required. Both the blade and socket are carefully heat treated. Bits are replaceable if needed. The TP Series is used in body work and door frames where considerable force is needed to break loose or reset Phillips type fasteners. Bits are replaceable.

For Socket Head Screws


For Clutch Head Screws


For Phillips Head Screws

SEE SECTION 16 FOR SETS OF ThESE TOOLS
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Bit & Part & Overall & Bit & & eter & Weight \\
\hline Size & No. & Length & Length & Drive End & Socket End & Lbs. \\
\hline 1/8 & TW4 & 2 & 1-1/4 & 21/32 & 1/2 & . 038 \\
\hline 1/8 & TW4BT & & 1-1/4 & & - & . 006 \\
\hline 5/32 & TW5 & 2 & 1-1/4 & 21/32 & 1/2 & . 038 \\
\hline 5/32 & TW5BT & - & 1-1/4 & - & - & . 008 \\
\hline 3/16 & TW6 & 2 & 1-1/4 & 21/32 & 1/2 & . 062 \\
\hline 3/16 & TW6BT & & 1-1/4 & - & - & . 013 \\
\hline 7/32 & TW7 & 2 & 1-1/4 & 21/32 & 1/2 & . 066 \\
\hline 7/32 & TW7BT & & 1-1/4 & -- & & . 016 \\
\hline 1/4 & TW8 & 1-31/32 & 1-1/4 & 21/32 & 21/32 & . 088 \\
\hline 1/4 & TW8BT & & 1-1/4 & & -- & . 022 \\
\hline 5/16 & TW10 & 2 & 1-5/16 & 21/32 & 21/32 & . 097 \\
\hline 5/16 & TW10BT & & 1-5/16 & & & . 033 \\
\hline 3/8 & TW12 & 2 & 1-3/8 & 21/32 & 21/32 & . 106 \\
\hline 3/8 & TW12BT & & 1-3/8 & & - & . 050 \\
\hline \multicolumn{7}{|l|}{Ref.: Fed. Spec. GGG-W-641b, Type 15 Holder.} \\
\hline 5/32 & TCL3 & 2-1/16 & 1-3/8 & 21/32 & 21/32 & . 084 \\
\hline 5/32 & TCL3BT & & 1-3/8 & & - & . 022 \\
\hline 1/4 & TCL5 & 2-1/16 & 1-3/8 & 21/32 & 21/32 & . 084 \\
\hline 1/4 & TCL5BT & - & 1-3/8 & - & - & . 022 \\
\hline 5/16 & TCL7 & 2-3/16 & 1-1/2 & 21/32 & 21/32 & . 091 \\
\hline 5/16 & TCL7BT & - & 1-1/2 & - & & . 028 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641b, Type 14, Class 2, Form C Bit, Type 15 Holder. TCL 7
\begin{tabular}{llllccc}
\hline \#1 & TP1 & \(1-15 / 16\) & \(1-1 / 4\) & \(21 / 32\) & \(21 / 32\) & .087 \\
\hline \#1 & TP1BT & - & \(1-1 / 4\) & - & - & .021 \\
\hline \#2 & TP2 & \(1-15 / 16\) & \(1-1 / 4\) & \(21 / 32\) & \(21 / 32\) & .084 \\
\hline \#2 & TP2BT & - & \(1-1 / 4\) & - & - & .021 \\
\hline \#3 & TP3 & \(1-15 / 16\) & \(1-1 / 4\) & \(21 / 32\) & \(21 / 32\) & .087 \\
\hline \#3 & TP3BT & - & \(1-1 / 4\) & - & - & .021 \\
\hline \#4 & TP4 & \(1-15 / 16\) & \(1-1 / 4\) & \(21 / 32\) & \(21 / 32\) & .087 \\
\hline \#4 & TP4BT & - & \(1-1 / 4\) & - & - & .025 \\
\hline\(\ldots\) & TPC & - & - & \(21 / 32\) & Socket Only & .062 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641b, Type 14, Class 2, Form A Bit; Type 15 Holder.

\section*{RATCHET - 3/8 INCH}

The 3/8 Inch Drive Bonney Ratchet is made of the finest select steel made to exacting specifications to give long and dependable service for the mechanic and repairman. Replaceable head T701-9. T701—Length: 7-3/8 inches. Weight: . 375 lbs .
Fed. Spec.: GGG-W-641B, Type 6, Class 1.

\section*{*T707-3/8 INCH DRIVE (SEALED HEAD)}

Positive movement in both the "engage" and "reverse" positions with the convenient thumb tip reversing button. The Pawl action is so designed to divert the load away from the teeth giving a smooth, quiet, positive movement with minimum fatigue. Exhaustive tests have proven satisfactory operation indefinitely, beyond normal work loads without fatigue, failure and without the danger of slippage!
(Patent pending)
T707 - Length: 7-1/4 inches. Weight: . 375 lbs.
HINGE HANDLE RATCHET-3/8 INCH SQUARE DRIVE
The T702 Hinge Handle Ratchet is especially handy for acquiring ratchet action at any angle. As in the regular ratchet, the head is replaceable in a matter of seconds. This one tool replaces the combination of a standard Ratchet and Hinge Handle. Useful where obstructions are a major factor, such as spark plug removal on late model cars. T702 - Length: 10-1/2 inches. Weight: 500 lbs.
HINGE HANDLE-3/8 INCH SQUARE DRIVE
The T720 Hinge Handle is especially useful for by-passing obstructions when working the various angles. Fits all types of attachments.
T720 - Length: 7-5/8 inches. Weight: . 397
lbs.
Fed. Spec.: GGG-W-641B, Type 5.
SPEEDER HANDLE-3/8 INCH SQUARE DRIVE
This Speeder Handle T742 is especially useful for quick tightening or loosening of nuts and bolts bringing to "snug tight." This tool is 17 inches long allowing application in hard-to-reach spots where the standard Ratchet and Extension could not be used.
T742 - Length: 17 inches. Weight: 1.095 lbs.
Fed. Spec.: GGG-W-641B, Type 8, Class 1.
EXTENSIONS - \(3 / 8\) INCH SQUARE DRIVE 3 INCHES THROUGH 17 INCHES

Bonney offers a complete range of Extensions, including \(3^{\prime \prime}\),
T603-T606 \(6^{\prime \prime}, 12^{\prime \prime}\) and \(17^{\prime \prime}\) in the popular \(3 / 8^{\prime \prime}\) Square Drive. Where the application calls for close quarter work on hard-to-get-at spots, there is a Bonney Extension to answer the need. T603 - Length: 3 inches. Weight: 147 lbs.
T606 - Length: 6 inches. Weight: 262 lbs. T612 - Length: 12 inches. Weight: .500 lbs. T617 - Length: 17-1/2 inches. Weight: . 750 lbs . Fed. Spec.: GGG-W-641B, Type 13, Class 1.
UNIVERSAL JOINT - 3/8 INCH SQUARE DRIVE
The T760 "U" Joint is probably the most handy tool in the mechanic's tool box. Used in conjunction with a socket and extension and/or ratchet, this tool allows working at unusual angles to by-pass any obstructions which might otherwise be impossible with the straight extension and socket.
T760 - Length: 1-7/8 inches. Weight: . 106 lbs.
Fed. Spec.: GGG-W-641B, Type 12.
*Notice will be made from factory when available for shipment (T707)

\section*{SLIDING "T" HANDLE - \(3 / 8\) INCH SQUARE DRIVE}

Used in conjunction with any socket, this handle makes it possible to reach into unusually close quarters to loosen or tighten nuts and bolts. A great deal of force can be exerted when the bar is extended to either extreme. T730-Length: 8 inches. Weight: . 422 lbs. Fed. Spec.: GGG-W-641B, Type 8, Class 1.

\section*{SPARK PLUG SOCKET-13/16 INCH OPENING, 3/8 INCH SQUARE DRIVE WITH SPARK PLUG RETAINER}

The Bonney Spark Plug Socket TLH26R is designed especially to hold a spark plug in place while removing from or inserting into the access hole in the engine. The special insert makes it possible to avoid dropping the spark plug and changing the gap setting or breaking the porcelain coating. Another unique feature of this socket is the \(3 / 4^{\prime \prime}\) hex on the top of the socket allowing use of a standard open end, box end or adjustable type wrench when obstructions make this necessary.

TLH26R - Length: 2-1/2 inches. Weight: . 281 lbs.

\section*{SCREWDRIVER HANDLE ATTACHMENT—}

The T780 Attachment allows "spin tight" action for nuts and bolts in hard-to-reach places. Any standard \(3 / 8^{\prime \prime}\) drive socket will fit this attachment.

T780 - Length: 5-1/8 inches. Weight: . 188 lbs.
Fed. Spec.: GGG-W-641b, Type VII, Class 3.

\section*{WOBBLE DRIVE EXTENSIONS - \(\mathbf{3} / 8\) INCH SQUARE DRIVE}

An exclusive with Bonney, these Extensions allow working at angles with standard sockets without the use of "U" Joint or Hinge Handle. Especially handy when obstructions are prominent.
AT4 - Length: 6 inches. Weight: . 212 lbs.
AT5 - Length: 12 inches. Weight: .400 lbs .
AT31 - Length: 3 inches. Weight: . 128 lbs.
*This tool is not guaranteed due to the peculiar design of the drive end.

\section*{SCREWDRIVER BLADE ATTACHMENT}

This tool-part no. T34-is especially useful for screwdriver action in conjunction with a Ratchet or other type of Attachment. Speedy tightening or loosening can be obtained by this means.
*Due to the construction of this tool, it does not carry the regular guarantee.
T34 - Length: 3-1/4 inches. Weight: .119 lbs.
Fed. Spec.: GGG-W-641b, Type XIV, Class 1, Form D.
T27

\section*{DRAG LINK SOCKET - 3 /8 INCH SQUARE DRIVE}

Used for Drag Link adjustments on passenger cars ald trucks. Will fit all standard \(3 / 8^{\prime \prime}\) drive attachments.
T27-Length: 1-3/32 inches. Weight: . 063 lbs.
Fed. Spec.: GGG-W-641b, Type XIV, Class 1, Form A.

\section*{ADAPTORS - \(3 / 8\) INCHES to \(\mathbf{1 / 2}\) INCHES -}

These Adaptors allow the mechanic to use one drive size Ratchet or Attachment for many different drive size sockets.
4215 - Female Drive \(3 / 8^{\prime \prime}\), Male Drive \(1 / 2^{\prime \prime}\). Weight: .084 lbs .
4216 - Female Drive \(3 / 8^{\prime \prime}\), Male Drive \(1 / 4^{\prime \prime}\). Weight: 031 lbs.
4206 - Female Drive \(1 / 2^{\prime \prime}\), Male Drive \(3 / 8^{\prime \prime}\). Weight: . 144 lbs .

\section*{CROSS BAR}

For added leverage on Attachments. Used with Hinge Handle

Bonney offers a complete line of \(1 / 2\) Inch Drive Sockets in openings from \(3 / 8^{\prime \prime}\) to \(1-1 / 4^{\prime \prime}\). These sockets are made in 6 pt . -8 pt . and 12 pt . openings for all types of applications, special or standard. Only the finest select alloy steel and finest craftsmanship go into making the Bonney Socket. Dependable service and precision fit are assured when the mechanic asks for Bonney.


Technical Data
\begin{tabular}{lcccccc}
\hline & Part \\
Opening \\
No.
\end{tabular} \begin{tabular}{c} 
Length \\
(L)
\end{tabular}\(\quad\)\begin{tabular}{c} 
Bolt \\
Clearance \\
(D)
\end{tabular}\(\quad\)\begin{tabular}{c} 
Diameter (O.D.) \\
Socket \\
End \\
(A)
\end{tabular}\(\quad\)\begin{tabular}{c} 
Drive \\
End \\
(B)
\end{tabular}\(\quad\)\begin{tabular}{c} 
Nose \\
Length \\
(E)
\end{tabular}\(\quad\)\begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular}

A12 THRU A19 \(\begin{array}{llll}(D) & (A) & (B) & (E)\end{array}\)

TWELVE-POINT OPENINGS - REGULAR LENGTH
\begin{tabular}{lccccccc}
\hline \(3 / 8\) & A12 & \(1-1 / 2\) & \(3 / 8\) & \(9 / 16\) & \(7 / 8\) & \(13 / 16\) & .106 \\
\hline \(7 / 16\) & A14 & \(1-1 / 2\) & \(3 / 8\) & \(41 / 64\) & \(7 / 8\) & \(13 / 16\) & .113 \\
\hline \(1 / 2\) & A16 & \(1-1 / 2\) & \(13 / 32\) & \(47 / 64\) & \(7 / 8\) & \(13 / 16\) & .122 \\
\hline \(17 / 32\) & A17 & \(1-1 / 2\) & \(7 / 16\) & \(25 / 32\) & \(7 / 8\) & \(13 / 16\) & .122 \\
\hline \(9 / 16\) & A18 & \(1-1 / 2\) & \(15 / 32\) & \(13 / 16\) & \(7 / 8\) & \(13 / 16\) & .119 \\
\hline \(19 / 32\) & A19 & \(1-1 / 2\) & \(15 / 32\) & \(27 / 32\) & \(7 / 8\) & \(13 / 16\) & .125 \\
\hline \(5 / 8\) & A20 & \(1-1 / 2\) & \(1 / 2\) & \(7 / 8\) & - & - & .125 \\
\hline \(21 / 32\) & A21 & \(1-1 / 2\) & \(1 / 2\) & \(15 / 16\) & - & - & .163 \\
\hline \(11 / 16\) & A22 & \(1-1 / 2\) & \(1 / 2\) & \(31 / 32\) & - & - & .163 \\
\hline \(3 / 4\) & A24 & \(1-1 / 2\) & \(19 / 32\) & \(1-1 / 32\) & - & - & .181 \\
\hline \(25 / 32\) & A25 & \(1-1 / 2\) & \(19 / 32\) & \(1-1 / 16\) & - & - & .188 \\
\hline \(13 / 16\) & A26 & \(1-1 / 2\) & \(19 / 32\) & \(1-1 / 8\) & - & - & .225 \\
\hline \(7 / 8\) & A28 & \(1-1 / 2\) & \(5 / 8\) & \(1-3 / 16\) & - & - & .244 \\
\hline \(15 / 16\) & A30 & \(1-9 / 16\) & \(23 / 32\) & \(1-1 / 4\) & - & - & .275 \\
\hline \(31 / 32\) & A31 & \(1-5 / 8\) & \(23 / 32\) & \(1-9 / 32\) & \(1-3 / 16\) & \(7 / 17\) & .266 \\
\hline 1 & A32 & \(1-5 / 8\) & \(3 / 4\) & \(1-11 / 32\) & \(1-1 / 4\) & \(7 / 16\) & .300 \\
\hline \(1-1 / 16\) & A34 & \(1-3 / 4\) & \(3 / 4\) & \(1-7 / 16\) & \(1-3 / 16\) & \(1 / 2\) & .388 \\
\hline \(1-1 / 8\) & A36 & \(1-3 / 4\) & \(3 / 4\) & \(1-1 / 2\) & \(1-1 / 4\) & \(1 / 2\) & .397 \\
\hline \(1-3 / 16\) & A38 & \(1-3 / 4\) & \(3 / 4\) & \(1-5 / 8\) & \(1-3 / 8\) & \(1 / 2\) & .438 \\
\hline \(1-1 / 4\) & A40 & \(1-3 / 4\) & \(3 / 4\) & \(1-11 / 16\) & \(1-7 / 16\) & \(1 / 2\) & .466 \\
\hline
\end{tabular}

\footnotetext{
Ref.: Fed. Spec. GGG-W-641B--Type 1—Class 1-1/2" Drive.
}

Featured on this page are the 6 pt . and 8 pt . Bonney Sockets, which are designed for all types of special applications. Close tolerances assure perfect fit on all Bonney Sockets. With the vast selection of opening sizes and opening styles, you can always find the right tool for the job with Bonney.


Technical Data
\begin{tabular}{llllllll}
\hline Opening & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Length \\
(L)
\end{tabular} & \begin{tabular}{c} 
Bolt \\
Clearance \\
(D)
\end{tabular} & \begin{tabular}{c} 
Diameter (O.D.) \\
Socket \\
End \\
(A)
\end{tabular} & \begin{tabular}{c} 
Drive \\
End \\
(B)
\end{tabular} & \begin{tabular}{c} 
Nose \\
Length \\
(E)
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{8}{|c|}{SIX-POINT OPENINGS - REGULAR LENGTH} \\
\hline 378 & AH12 & 1-1/2 & 3/8 & 9/16 & 7/8 & 13/16 & . 106 \\
\hline 7/16 & AH14 & 1-1/2 & 3/8 & 41/64 & 7/8 & 13/16 & . 113 \\
\hline 1/2 & AH16 & 1-1/2 & 13/32 & 47/64 & 7/8 & 13/16 & . 122 \\
\hline 9/16 & AH18 & 1-1/2 & 15/32 & 13/16 & 7/8 & 13/16 & . 119 \\
\hline 5/8 & AH20 & 1-1/2 & \(1 / 2\) & 7/8 & - & - & . 125 \\
\hline 11/16 & AH22 & 1-1/2 & 1/2 & 31/32 & - & - & . 163 \\
\hline 3/4 & AH24 & 1-1/2 & 19/32 & 1-1/32 & - & - & . 181 \\
\hline 13/16 & AH26 & 1-1/2 & 19/32 & 1-1/8 & - & - & . 225 \\
\hline 7/8 & AH28 & 1-1/2 & 5/8 & 1-3/16 & - & - & . 244 \\
\hline 15/16 & AH30 & 1-9/16 & 23/32 & 1-1/4 & - & - & . 275 \\
\hline 1 & AH32 & 1-5/8 & 3/4 & 1-11/32 & 1-1/4 & \(7 / 16\) & . 300 \\
\hline 1-1/16 & AH34 & 1-3/4 & 3/4 & 1-7/16 & 1-3/16 & 1/2 & . 388 \\
\hline 1-1/8 & AH36 & 1-3/4 & 3/4 & 1-1/2 & 1-1/4 & 1/2 & . 397 \\
\hline 1-3/16 & AH38 & 1-3/4 & \(3 / 4\) & 1-5/8 & 1-3/8 & 1/2 & . 438 \\
\hline 1-1/4 & AH40 & 1-3/4 & 3/4 & 1-11/16 & 1-7/16 & \(1 / 2\) & . 466 \\
\hline
\end{tabular}

EIGHT-POINT OPENINGS - REGULAR LENGTH
\begin{tabular}{llllllll}
\hline \(3 / 8\) & AS12 & \(1-1 / 2\) & \(9 / 32\) & \(11 / 16\) & \(7 / 8\) & \(13 / 16\) & .120 \\
\hline \(7 / 16\) & AS14 & \(1-1 / 2\) & \(5 / 16\) & \(13 / 16\) & \(7 / 8\) & \(13 / 16\) & .141 \\
\hline \(1 / 2\) & AS16 & \(1-1 / 2\) & \(3 / 8\) & \(7 / 8\) & \(7 / 8\) & - & .125 \\
\hline \(9 / 16\) & AS18 & \(1-1 / 2\) & \(7 / 16\) & \(1-1 / 32\) & \(1-1 / 32\) & - & .225 \\
\hline \(5 / 8\) & AS20 & \(1-1 / 2\) & \(7 / 16\) & \(1-1 / 16\) & \(1-1 / 16\) & - & .225 \\
\hline \(11 / 16\) & AS22 & \(1-1 / 2\) & \(7 / 16\) & \(1-3 / 16\) & \(1-3 / 16\) & & .292 \\
\hline \(3 / 4\) & AS24 & \(1-9 / 16\) & \(1 / 2\) & \(1-1 / 4\) & \(1-1 / 4\) & - & .356 \\
\hline \(13 / 16\) & AS26 & \(1-5 / 8\) & \(1 / 2\) & \(1-3 / 8\) & \(1-9 / 32\) & \(7 / 16\) & .394 \\
\hline \(7 / 8\) & AS28 & \(1-3 / 4\) & \(1 / 2\) & \(1-1 / 2\) & \(1 / 1-4\) & \(1 / 2\) & .509 \\
\hline \(15 / 16\) & AS30 & \(1-3 / 4\) & \(1 / 2\) & \(1-5 / 8\) & \(1-3 / 8\) & \(1 / 2\) & .556 \\
\hline 1 & AS32 & \(1-3 / 4\) & \(9 / 16\) & \(1-11 / 16\) & \(1-7 / 16\) & \(1 / 2\) & .663 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641B-Type 1-Class 1-1/2" Drive.


\section*{1/2 INCH SQUARE DRIVE DEEP THROAT SOCKETS}

These Bonney sockets are made of high grade alloy steel machined to close tolerances for perfect fit for specific jobs. The deep throat on these sockets allows clearances for long bolts and hard-to-reach applications.

Illustrated above are the two types of Bonney deep sockets offered in 12 pt . openings ranging in size from \(1 / 2^{\prime \prime}\) to \(1-1 / 8^{\prime \prime}\). These sockets are especially handy where bolts or studs protrude beyond the nut. Also where the standard socket is not long enough to reach into the tight spot.
\begin{tabular}{lllccccc}
\hline \multicolumn{7}{c}{ Technical Data } \\
\hline Opening & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & Length & \begin{tabular}{c} 
Bolt \\
Clearance Socket End Drive End
\end{tabular} & \begin{tabular}{c} 
Nose \\
Length
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline & & TWELVE-POINT OPENINGS DEEP & & \\
\hline \(1 / 2\) & LD16 & \(3-1 / 4\) & \(5 / 8\) & \(47 / 64\) & \(7 / 8\) & \(3 / 4\) & .294 \\
\hline \(9 / 16\) & LD18 & \(3-1 / 4\) & \(5 / 8\) & \(51 / 64\) & \(7 / 8\) & \(3 / 4\) & .269 \\
\hline \(5 / 8\) & LD20 & \(3-1 / 4\) & \(1 / 2\) & \(7 / 8\) & \(7 / 8\) & - & .238 \\
\hline \(11 / 16\) & LD22 & \(3-1 / 4\) & \(11 / 16\) & \(15 / 16\) & \(15 / 16\) & - & .269 \\
\hline \(3 / 4\) & LD24 & \(3-1 / 4\) & \(11 / 16\) & \(1-1 / 32\) & \(1-1 / 32\) & - & .333 \\
\hline \(13 / 16\) & LD26T & \(3-1 / 4\) & \(11 / 16\) & \(1-1 / 16\) & \(1-1 / 16\) & - & .350 \\
\hline \(7 / 8\) & LD28 & \(3-1 / 4\) & \(11 / 16\) & \(1-3 / 16\) & \(1-3 / 16\) & - & .450 \\
\hline \(7 / 8\) & LD28T & \(3-1 / 4\) & \(11 / 16\) & \(1-9 / 64\) & \(1-3 / 16\) & \(5 / 8\) & .425 \\
\hline \(15 / 16\) & LD30 & \(3-1 / 4\) & \(11 / 16\) & \(1-1 / 4\) & \(1-1 / 4\) & - & .500 \\
\hline 1 & LD32 & \(3-1 / 4\) & \(3 / 4\) & \(1-11 / 32\) & \(1-11 / 32\) & - & .575 \\
\hline 1 & LD32T & \(3-1 / 4\) & \(3 / 4\) & \(1-9 / 32\) & \(1-11 / 32\) & \(1-5 / 16\) & .531 \\
\hline \(1-1 / 16\) & LD34 & \(3-1 / 4\) & \(3 / 4\) & \(1-7 / 16\) & \(1-7 / 16\) & - & .713 \\
\hline \(1-1 / 8\) & LD36 & \(3-1 / 4\) & \(3 / 4\) & \(1-1 / 2\) & \(1-1 / 2\) & - & .750 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641B, Type 1, Class 2.


\section*{Technical Data}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Opening} & \multirow[b]{2}{*}{Part No.} & \multirow[b]{2}{*}{Length (L)} & \multicolumn{2}{|r|}{Diameter} & \multirow[t]{2}{*}{\(\qquad\) Thicknes (T)} & \multirow[t]{2}{*}{Slotted Opening (C)} & \multirow[b]{2}{*}{Weight Lbs.} \\
\hline & & & Head (B) & Drive End (W) & & & \\
\hline 1-1/8 & AF36 & 2-1/8 & 1-19/32 & 27/32 & 15/16 & 7/8 & . 213 \\
\hline 1-3/16 & AF38 & 2-1/4 & 1-21/32 & 27/32 & 15/16 & 59/64 & . 209 \\
\hline 1-1/4 & AF40 & 2-5/16 & 1-3/4 & 27/32 & 15/16 & 61/64 & . 231 \\
\hline 1-5/16 & AF42 & 2-5/16 & 1-13/16 & 27/32 & 15/16 & 63/64 & . 231 \\
\hline 1-3/8 & AF44 & 2-3/8 & 1-29/32 & 27/32 & 1 & 1-5/64 & . 284 \\
\hline 1-7/16 & AF46 & 2-1/2 & 1-31/32 & 27/32 & 1 & 1-5/64 & . 303 \\
\hline 1-1/2 & AF48 & 2-1/2 & 2-1/32 & 27/32 & 1 & 1-9/64 & . 266 \\
\hline 1-9/16 & AF50 & 2-5/8 & 2-1/8 & 27/32 & 1 & 1-11/64 & . 338 \\
\hline 1-5/8 & AF52 & 2-5/8 & 2-3/16 & 27/32 & 1 & 1-1/4 & . 344 \\
\hline 1-11/16 & AF54 & 2-3/4 & 2-9/32 & 27/32 & 1-1/16 & 1-21/64 & . 413 \\
\hline 1-3/4 & AF56 & 2-7/8 & 2-11/32 & 27/32 & 1-1/16 & 1-21/64 & . 406 \\
\hline 1-13/16 & AF58 & 2-7/8 & 2-7/16 & 27/32 & 1-1/16 & 1-23/64 & . 375 \\
\hline 1-7/8 & AF60 & 3 & 2-17/32 & 27/32 & 1-1/8 & 1-25/64 & . 500 \\
\hline 1-15/16 & AF62 & 3 & 2-19/32 & 27/32 & 1-1/8 & 1-29/64 & . 500 \\
\hline 2 & AF64 & 3-1/8 & 2-11/16 & 7/8 & 1-1/8 & 1-37/64 & . 550 \\
\hline \multicolumn{8}{|l|}{Ref.: Fed. Spee. GGG-W-641b, Type 2, Class 1.} \\
\hline
\end{tabular}

\section*{CROWFOOT (CAMBER WRENCHES) - \(1 / 2\) INCH SQ. DRIVE}

The four special Crowfoot Camber Attachments listed below were developed to handle camber adjustments on late model automobiles using \(1 / 2^{\prime \prime}\) Square Drive Attachments that provide maximum flexibility to suit the varied conditions encountered.
1609 - Fits late model Pontiac
1611 - Fits Ford, Mercury, Lincoln
1612 - Fits Chrysler
1613 - Fits Plymouth, Dodge, DeSoto
1614 and 1615 - Fits other makes and models
*See Section 16, Page 15 for Set \#N8, which includes the aforementioned Crowfoot Wrenches.


Technical Data
\begin{tabular}{|c|c|c|c|c|c|}
\hline Opening & Part No. & Length (L) & Diameter
(B) & Depth of Opening (C) & Weight Lbs. \\
\hline 1-1/4 & 1609 & 2-3/4 & 2-5/8 & 1-1/4 & . 250 \\
\hline 1-5/16 & 1611 & 2-3/4 & 2-5/8 & 1-1/4 & . 250 \\
\hline 1-13/32 & 1612 & 2-3/4 & 2-5/8 & 1-1/4 & . 256 \\
\hline 1-7/16 & 1613 & 2-3/4 & 2-5/8 & 1-1/4 & . 247 \\
\hline 1-1/2 & 1614 & 2-3/4 & 2-5/8 & 1-1/4 & . 244 \\
\hline 1-3/8 & 1615 & 2-3/4 & 2-5/8 & 1-1/4 & . 247 \\
\hline
\end{tabular}


Technical Data
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Opening & Part No. & Length (L) & \begin{tabular}{l}
Diameter \\
Head (B)
\end{tabular} & \[
\begin{aligned}
& \hline \text { O.D.) } \\
& \text { Drive End } \\
& \text { (W) } \\
& \hline
\end{aligned}
\] & Thkns. Head (T) & Depth of Opening (C) & Weight Lbs. \\
\hline 15/16 & AC30 & 2-13/16 & 1-15/16 & 1 & 1/2 & 1-1/16 & . 375 \\
\hline 1 & AC32 & 2-13/16 & 1-15/16 & 1 & \(1 / 2\) & 1-1/8 & . 366 \\
\hline 1-1/16 & AC34 & 2-29/32 & 2-1/8 & 1 & 5/8 & 1-9/32 & . 475 \\
\hline 1-1/8 & AC36 & 2-29/32 & 2-1/8 & 1 & 5/8 & 1-5/16 & . 444 \\
\hline 1-3/16 & AC38 & 2-31/32 & 2-1/4 & 1 & \(5 / 8\) & 1-5/16 & . 506 \\
\hline 1-1/4 & AC40 & 2-31/32 & 2-1/4 & 1 & 5/8 & 1-7/16 & . 475 \\
\hline 1-5/16 & AC42 & 3-19/64 & 2-1/2 & 1 & 5/8 & 1-9/16 & . 600 \\
\hline 1-3/8 & AC44 & 3-19/64 & 2-1/2 & 1 & 5/8 & 1-19/32 & . 563 \\
\hline 1-7/16 & AC46 & 3-3/8 & 2-3/4 & 1 & 5/8 & 1-23/32 & . 694 \\
\hline 1-1/2 & AC48 & 3-3/8 & 2-3/4 & 1 & 5/8 & 1-3/4 & . 669 \\
\hline 1-9/16 & AC50 & 3-17/32 & 2-15/16 & 1 & 5/8 & 1-7/8 & . 750 \\
\hline 1-5/8 & AC52 & 3-17/32 & 2-15/16 & 1 & 5/8 & 1-29/32 & . 744 \\
\hline 1-11/16 & AC54 & 3-17/32 & .2-15/16 & 1 & 5/8 & 1-15/16 & . 694 \\
\hline 1-3/4 & AC56 & 3-7/8 & 3-1/4 & 1 & 5/8 & 2-1/16 & . 919 \\
\hline 1-13/16 & AC58 & 3-7/8 & 3-1/4 & 1 & 5/8 & 2-1/8 & . 875 \\
\hline 1-7/8 & AC60 & 3-7/8 & 3-1/4 & 1 & 5/8 & 2-5/32 & . 850 \\
\hline 1-15/16 & AC62 & 4 & 3-9/16 & 1 & 5/8 & 2-5/16 & 1.100 \\
\hline 2 & AC64 & 4 & 3-9/16 & 1 & 5/8 & 2-11/32 & 1.069 \\
\hline 2-1/16 & AC66 & 4 & 3-9/16 & 1 & 5/8 & 2-3/8 & 1.025 \\
\hline 2-1/8 & AC68 & 4-1/16 & 3-15/16 & 1 & 5/8 & 2-1/4 & 1.150 \\
\hline 2-3/16 & AC70 & 4-1/16 & 3-15/16 & 1 & 5/8 & 2-9/32 & 1.125 \\
\hline 2-1/4 & AC72 & 4-1/16 & 3-15/16 & 1 & 5/8 & 2-3/8 & 1.088 \\
\hline 2-5/16 & AC74 & 4-5/16 & 4-3/8 & 1 & 5/8 & 2-19/32 & 1.500 \\
\hline 2-3/8 & AC76 & 4-5/16 & 4-3/8 & 1 & 5/8 & 2-5/8 & 1.513 \\
\hline 2-7/16 & AC78 & 4-5/16 & 4-3/8 & 1 & 5/8 & 2-21/32 & 1.425 \\
\hline 2-1/2 & AC80 & 4-5/16 & 4-3/8 & 1 & 5/8 & 2-23/32 & 1.375 \\
\hline 2-9/16 & AC82 & 4-5/16 & 4-3/8 & 1 & 5/8 & 2-3/4 & 1.388 \\
\hline 2-5/8 & AC84 & 4-5/16 & 5-1/32 & 1 & 5/8 & 2-25/32 & 1.825 \\
\hline 2-11/16 & AC86 & 4-5/16 & 5-1/32 & 1 & 5/8 & 2-27/32 & 1.738 \\
\hline 2-3/4 & AC88 & 4-5/16 & 5-1/32 & 1 & 5/8 & 2-7/8 & 1.700 \\
\hline 2-13/16 & AC90 & 4-5/16 & 5-1/32 & 1 & 5/8 & 2-29/32 & 1.650 \\
\hline 2-7/8 & AC92 & 4-5/16 & 5-1/32 & 1 & 5/8 & 2-15/16 & 1.619 \\
\hline 2-15/16 & AC94 & 4-5/16 & 5-1/32 & 1 & 5/8 & 2-31/32 & 1.544 \\
\hline 3 & AC96 & 4-5/16 & 5-1/32 & 1 & 5/8 & 3 & 1.519 \\
\hline
\end{tabular}

\section*{TORQUE WRENCH ATTACHMENTS AND CYLINDER HEAD WRENCHES* 2613 THRU 2617}

These Attachments, in addition to being used in connection with Torque Wrenches to obtain true torque readings, are also used for Cylinder Head nuts and bolts. The peculiar design of the wrench allows by-passing obstructions on the Cylinder Head itself.
*See Section 2, Page 13 for additional information on the various wrenches.

\section*{DRAG LINK SOCKETS - \(\mathbf{1 / 2}\) INCH SQUARE DRIVE}

A785, A786 A787

Used for Drag Link adjustments on passenger cars and trucks. Will fit all standard \(1 / 2^{\prime \prime}\) drive attachments.
A785 - Length: 1-9/16 inches. Weight: . 191 lbs.
A786 - Length: 1-9/16 inches. Weight: . 175 lbs.
A787 - Length: 1-11/16 inches. Weight: . 241 lbs.
Fed. Spec.: GGG-W-641B, Type 14, Form A, Class 1.

\section*{CONNECTING ROD SOCKET FOR FORD 1/2 INCH SQUARE DRIVE}

The F18 is used on Connecting Rod on late model Ford cars. Due to the peculiar design and application required of this socket, it does not carry the regular Bonney guarantee.
F18 - Length: 1-7/32 inches. Weight: . 109 lbs.
ADAPTORS - \(1 / 2\) INCH SQUARE DRIVE.
\(1 / 2\) INCH to \(3 / 8 \mathrm{INCH}\) and \(1 / 2\) INCH to \(3 / 4 \mathrm{INCH}\)
These Adaptors allow the mechanic to convert the Ratchet or Attachment in a particular drive size to a combination drive size without buying additional tools.
4206 - Female Drive \(1 / 2^{\prime \prime}\). Male Drive \(3 / 8^{\prime \prime}\). Weight: . 144 lbs. 4298 - Female Drive 1/2". Male Drive \(3 / 4^{\prime \prime}\). Weight: 1.438 lbs. 4299 - Female Drive 3/4". Male Drive 1/2". Weight: . 344 lbs.

\section*{STUD REMOVER - \(1 / 2\) INCH SQUARE DRIVE. HANDLES STUDS FROM 1/4 INCH TO \(3 / 4\) INCH IN DIAMETER}

Bonney Stud Wrench \#2591 is used with the \(1 / 2^{\prime \prime}\) Square Drive Handles and Attachments for removing and setting studs. Will handle studs from \(1 / 4^{\prime \prime}\) to \(3 / 4^{\prime \prime}\) diameter. An eccentrically mounted roller with deep milled edge provides a non-slipping, non-burring, clipping device.
2591 - Length: 2 inches. Weight: . 053 lbs. Fed. Spec.: GGG-S-775, Type 3.

\section*{CROSS BAR FOR ADDED LEVERAGE}

Used with Hinge Handle for added force.
A775 - Length: 8 inches. Weight: . 244 lbs.

\section*{CONNECTING ROD SOCKET (CADILLAC) -}

\section*{1/2 INCH SQUARE DRIVE}

This tool is especially designed for Connecting Rods on Cadillac cars. Due to the unusual design, this tool does not carry the regular Bonney guarantee.
2571 - Length: 1-3/8 inches. Weight: . 134 lbs .

The \(1 / 2\) Inch Drive Bonney Ratchet is made of finest select steel drop forged and machined to exacting specifications to give long, dependable service for the mechanic and repairman. Replaceable heads A701-9.

A701
A701 - Length: 10 inches. Weight: 1.062 lbs.
A703
A703 - Length: 15 inches. Weight: 1.781 lbs.
*A707-1/2 INCH DRIVE (SEALED HEAD)
Positive movement in both the "engage" and "reverse" positions with the convenient thumb tip reversing button. The Pawl action is so designed to divert the load away from the teeth giving a smooth, quiet, positive movement with minimum fatigue. Exhaustive tests have proven satisfactory operation indefinitely, beyond normal work loads without fatigue, failure and without the danger of slippage!

A707-Length: 10 inches. Weight: 1.094 lbs .

Two sizes of Speeder Handles are offered so as to cover the wide scope of applications encountered. Both of these handles are especially useful to speed up tightening

A740-744 or loosening nuts and bolts when used in connection with standard sockets.
A740 - Length: 16 inches. Weight: 1.400 lbs. A744 - Length: 19 inches. Weight: 1.625 lbs. Fed. Spec.: GGG-W-641B, Type 7, Class 1.

\section*{HINGE HANDLE - \(1 / 2\) INCH SQUARE DRIVE}

These Hinge Handles are especially useful for working at angles in close quarters where obstructions are encountered. Fits all standard \(1 / 2^{\prime \prime}\) Sockets and Attachments.

A720
A720 - Length: 12-1/2 inches. Weight: 1.431 lbs .
A722
A722 - Length: 15-1/2 inches. Weight: 1.650 lbs.
A724 A724 - Length: 18-1/2 inches. Weight: 1.825 lbs. Fed. Spec.: GGG-W-641B, Type 5.

\section*{SLIDING "T" HANDLE - \(1 / 2\) INCH SQUARE DRIVE}

This tool is especially useful in connection with any standard \(1 / 2^{\prime \prime}\) Socket allowing close quarter application where an overhead obstruction is encountered. Unusual force can be applied when the bar is extended to either extreme.
A730 - Length: 11 inches. Weight: 1.075 lbs.
Fed. Spec.: GGG-W-641B, Type 8, Class 1.

\section*{EXTENSIONS - \(1 / 2\) INCH SQUARE DRIVE}

Offered in lengths from 2 " to 20 ". These extensions "reach" into those tight spots.
A602 - Length: 2 inches. Weight: . 181 lbs .
A605-Length: 5 inches. Weight: 384 lbs.
A610 - Length: 10 inches. Weight: . 650 lbs.
A620 - Length: 20 inches. Weight: 1.156 lbs.
Fed. Spec.: GGG-W-641B, Type 13, Class 1.

\section*{UNIVERSAL JOINT - \(\mathbf{1 / 2}\) INCH SQUARE DRIVE}

This tool allows the mechanic to work at peculiar angles using standard 1/2" Drive Sockets and Attachments.
A760 - Length: 2-5/8 inches. Weight: . 275 lbs.
Fed. Spec.: GGG-W-641B, Type 12.
*Notice will be made by factory when available for shipment (A707)

\section*{SOCKETS - 3/4 INCH 12 POINT REGULAR \& 6 POINT DEEP BONNNET}

\section*{HEAVY DUTY SOCKETS}

These \(3 / 4^{\prime \prime}\) Square Drive Sockets are designed for rugged use in breaking loose or tightening bolts and nuts on tractors and trucks. Top quality alloy steel and finest craftsmanship go into making these sockets dependable and long lasting. Nickel chrome plated for extra protection against rust and corrosion. These sockets are offered in a range of sizes from \(7 / 8^{\prime \prime}\) opening through \(2-1 / 4^{\prime \prime}\) opening, in both 6 pt . and 12 pt . types. The deep sockets listed at the bottom of the page are used for truck "U" bolts and other applications where the bolts extend through the nut. Precision broached for accurate fit.


\section*{Technical Data}


\section*{BONNEY RATCHET - 3/4 INCH SQUARE DRIVE}

This heavy duty ratchet incorporates the replaceable head found in other Bonney Ratchets. This makes quick and easy repairs possible in the field.
R701 - Length: 20 inches. Weight: 7.375 lbs.
Fed. Spec.: GGG-W-641B, Type 6, Class 1.

\section*{REPLACEABLE HEADS}

By merely removing the Snap Ring, the head can be removed and replaced in a matter of minutes.
R701-9 - Replaceable Head
R701-6 - Snap-Ring

\section*{ADAPTORS - \(3 / 4\) INCH SQUARE DRIVE.}

\section*{3/4 INCHES to \(1 / 2\) INCHES and \(3 / 4\) INCHES to 1 INCH}

4211 - Female Drive 3/4". Male Drive 1". Weight: 600 lbs.
4213 - Female Drive 1". Male Drive 3/4". Weight: 1.375 lbs.
4299 - Female Drive 3/4". Male Drive \(1 / 2^{\prime \prime}\). Weight: . 344 lbs.
4298 - Female Drive \(1 / 2^{\prime \prime}\). Male Drive \(3 / 4^{\prime \prime}\). Weight: 1.438 lbs.

\section*{UNIVERSAL JOINTS - 3/4 INCH SQUARE DRIVE}

This Bonney tool allows the mechanic to work at any angle using standard 3/4" Sockets and Attachments. All parts are polished and nickel chrome plated plus exacting heat treated to assure service under rugged conditions.
R760 - Length: 4 inches. Weight: 1 lb .
Fed. Spec.: GGG-W-641B, Type 12.

\section*{EXTENSIONS - 3 /4 INCH SQUARE DRIVE. 4 INCHES to 17 INCHES}

*DRIVE HEAD, MALE-3/4 INCH SQUARE DRIVE
When this tool is used in conjunction with handle \#776 it forms the popular sliding " \(T\) " used for close quarter work calling for extra power for tightening or loosening.
R731 - Length: 2-3/8 inches. Weight: . 718 lbs .

\section*{*FLEXIBLE HEAD-3/4 INCH SQUARE DRIVE}

This tool used with the handle \(\# 776\) forms a hinge handle which allows the mechanic to work at angles and still obtain maximum power. R721 - Length: 5-5/8 inches. Weight: 3.34 lbs .

\section*{*HANDLE (USED WITH R731 AND R721)}

This handle \#776 is used with the drive head \#731 to form a sliding "T" or with the flexible head \#721 to form a hinge handle.
R776 - Length: 18 inches. Diameter: 7/8 inch. Weight: 3.06 lbs .
*New design-notice will be made by factory when available.

\section*{HEAVY DUTY SOCKETS - 1 INCH DRIVE}

These sockets are offered in 12 pt. openings \(1^{\prime \prime}\) drive made to fit any standard 1" Extension or Attachment. The rugged construction of these sockets allows the mechanic to perform heavy duty work using the correct tool for the job. These sockets are offered in openings from \(1-7 / 16^{\prime \prime}\) through \(3-1 / 8^{\prime \prime}\).


\section*{Technical Dała}
\begin{tabular}{lcccccc}
\hline \multirow{3}{*}{ Opening } & Part & Length & Bolt & Diameter (O.D.) \\
Clearance & Socket End & Drive End & Weight \\
& No. & (L) & (D) & (A) & (B) & Lbs. \\
\hline
\end{tabular}

TWELVE-POINT OPENINGS
\begin{tabular}{lllllll}
\hline \(1-7 / 16\) & X46 & \(2-5 / 16\) & 1 & 2 & \(1-11 / 16\) & .863 \\
\hline \(1-1 / 2\) & X48 & \(2-3 / 8\) & 1 & \(2-1 / 16\) & \(1-3 / 4\) & .950 \\
\hline \(1-5 / 8\) & X52 & \(2-1 / 2\) & \(1-1 / 16\) & \(2-1 / 4\) & \(1-3 / 4\) & 1.144 \\
\hline \(1-13 / 16\) & X58 & \(3-3 / 16\) & \(1-7 / 8\) & \(2-5 / 8\) & \(1-7 / 8\) & 1.413 \\
\hline \(1-7 / 8\) & X60 & \(2-15 / 16\) & \(1-5 / 8\) & \(2-5 / 8\) & \(2-5 / 16\) & 2.025 \\
\hline 2 & X64 & \(3-15 / 32\) & \(2-1 / 8\) & \(2-27 / 32\) & \(1-7 / 8\) & 2.513 \\
\hline \(2-3 / 16\) & X70 & \(3-3 / 16\) & \(1-11 / 16\) & 3 & \(2-1 / 4\) & 2.563 \\
\hline \(2-1 / 4\) & X72 & \(3-13 / 16\) & \(2-1 / 4\) & \(3-1 / 8\) & 2 & 2.675 \\
\hline \(2-5 / 16\) & X74 & \(3-7 / 8\) & \(2-1 / 4\) & \(3-3 / 16\) & 2 & 2.719 \\
\hline \(2-3 / 8\) & X76 & \(3-15 / 16\) & \(2-1 / 4\) & \(3-1 / 4\) & 2 & 2.944 \\
\hline \(2-7 / 16\) & X78 & \(4-1 / 8\) & \(2-3 / 8\) & \(3-7 / 16\) & 2 & 3.044 \\
\hline \(2-1 / 2\) & X80 & \(4-5 / 16\) & \(2-5 / 16\) & \(3-5 / 8\) & 2 & 3.094 \\
\hline \(2-9 / 16\) & X82 & \(3-1 / 2\) & \(1-7 / 8\) & \(3-3 / 8\) & \(2-1 / 4\) & 3.175 \\
\hline \(2-5 / 8\) & X84 & \(4-1 / 2\) & \(2-1 / 2\) & \(3-3 / 4\) & 2 & 3.563 \\
\hline \(2-3 / 4\) & X88 & \(4-13 / 16\) & \(2-1 / 2\) & 4 & 2 & 4.369 \\
\hline \(2-15 / 16\) & X94 & \(4-7 / 8\) & \(2-9 / 16\) & \(4-3 / 16\) & 2 & 5.250 \\
\hline 3 & X96 & \(4-29 / 32\) & \(2-19 / 32\) & \(4-9 / 32\) & 2 & 8.250 \\
\hline \(3-1 / 8\) & X100 & \(4-15 / 16\) & \(2-5 / 8\) & \(4-3 / 8\) & 2 & 8.948 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641b, Type 1, Class 1.

\section*{RATCHETS - 1 INCH SQUARE DRIVE}

This rugged Ratchet incorporates the unique Replaceable Head found in all Bonney Ratchets enabling the mechanic to replace worn or defective heads in a matter of minutes.
X701 - Length: 20 inches. Weight: 7.375 lbs.
Fed. Spec.: GGG-W-641b, Type 6, Class 1.

\section*{\(\star\) REPLACEABLE HEADS}

By merely removing the Snap Ring, the defective head can be removed and replaced quickly and repaired in the field.
X701-9 - Replaceable Head
R701-6 - Snap Ring
ADAPTOR - 1 INCH SQUARE DRIVE. 1 INCH to \(\mathbf{3 / 4}\) INCH
4213 - Female Drive \(1^{\prime \prime}\). Male Drive \(3 / 4^{\prime \prime}\). Weight: 1.375 lbs.
4211 - Female Drive 3/4". Male Drive 1". Weight: . 600 lbs.

\section*{*DRIVE HEAD, MALE-1 INCH SQUARE DRIVE}

When this tool is used in conjunction with handle \#776 it forms the popular sliding "T" used for close quarter work calling for extra power for tightening or loosening.
X731 - Length: 2-13/16 inches. Weight: 1.200 lbs .

\section*{*FLEXIBLE HEAD-1 INCH SQUARE DRIVE}

This tool used with the handle \(\# 776\) forms a hinge handle which allows the mechanic to work at angles and still obtain maximum power. X721-Length: 6 inches. Weight: 3.90 lbs .

\section*{*HANDLE (USED WITH X731 AND X721)}

This handle \#776 is used with the drive head \#731 to form a sliding "T" or with the flexible head \#721 to form a hinge handle. X776 - Length: 30 inches. Diameter: 1 inch. Weight: 3.95 lbs . *New design-notice will be made by factory when available.

\section*{Designed for long, dependable service...}

The Bonney "streamlined" wrench is truly an outstanding wrench design. It is light in weight, well balanced and has no sharp edges to hamper its "quality appearance." Made of high grade alloy steel; drop forged, heat treated and nickel-chrome plated under exacting specifications. All openings machined to close tolerances for the best possible fit on all jobs.
- FAMOUS BONNE "STREAMLINED" WRENCHES
- COMPLETE RANGE OF SIZES AND TYPES
- SPECIAL WRENCHES FOR VARIOUS ADJUSTMENTS
- BUILTIN CRAFTSMANSHIP AND QUALITY


Bonney offers a complete line of wrenches for all types of service. All inquiries are answered immediately.

Listed below are open end wrenches ranging in sizes from \(1 / 4^{\prime \prime} \times 5 / 16^{\prime \prime}\) through \(1-1 / 4^{\prime \prime} \times 1-3 / 8^{\prime \prime}\) openings offered in the Bonney Tool Line. These wrenches are of the streamlined design having the center panel for added strength and attractiveness. All of the Bonney wrenches listed herein are manufactured to exacting specifications using top grade alloy steel and the finest craftsmanship available. All wrenches are nickel chrome plated and drop forged.


Technical Data
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|c|}{Openings} & \multirow[t]{2}{*}{Part No.} & \multirow[t]{2}{*}{\begin{tabular}{l}
Length \\
(L)
\end{tabular}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Head Diameter \\
(E) \\
(F)
\end{tabular}}} & Head & Weight \\
\hline (A) & (B) & & & & & (T) & \\
\hline 1/4 & 5/16 & E810 & 4-1/4 & 9/16 & 11/16 & 5/32 & . 025 \\
\hline 5/16 & 11/32 & E1011 & 4-3/4 & 11/16 & 13/16 & 3/16 & . 060 \\
\hline 5/16 & 3/8 & E1012 & 4-3/4 & 11/16 & 13/16 & 3/16 & . 060 \\
\hline 3/8 & 7/16 & E1214 & 5-1/4 & 13/16 & 15/16 & 7/32 & . 075 \\
\hline 3/8 & 1/2 & E1216 & 5-3/4 & 15/16 & 1-1/16 & 15/64 & . 113 \\
\hline 7/16 & 1/2 & E1416 & 5-3/4 & 15/16 & 1-1/16 & 15/64 & . 113 \\
\hline 7/16 & 9/16 & E1418 & 6 & 15/16 & 1-9/64 & 1/4 & . 134 \\
\hline 1/2 & 9/16 & E1618 & 6-1/4 & 1-1/16 & 1-3/16 & 1/4 & . 147 \\
\hline 1/2 & 19/32 & E1619 & 6-1/4 & 1-1/16 & 1-3/16 & 1/4 & . 138 \\
\hline 9/16 & 5/8 & E1820 & 7 & 1-3/16 & 1-5/16 & 17/64 & . 122 \\
\hline 9/16 & 11/16 & E1822 & 7-3/4 & 1-5/16 & 1-7/16 & 9/32 & . 263 \\
\hline 19/32 & 25/32 & E1925 & 8-3/16 & 1-1/4 & 1-5/8 & 21/64 & . 319 \\
\hline 5/8 & 11/16 & E2022 & 7-3/4 & 1-5/16 & 1-7/16 & 9/32 & . 263 \\
\hline 5/8 & 3/4 & E2024 & 8-3/16 & 1-1/4 & 1-5/8 & 21/64 & . 444 \\
\hline 11/16 & 3/4 & E2224 & 8-1/2 & 1-7/16 & 1-9/16 & 5/16 & . 325 \\
\hline 3/4 & 13/16 & E2426 & 9-1/4 & 1-9/16 & 1-11/16 & 11/32 & . 406 \\
\hline 3/4 & \(7 / 8\) & E2428 & 9-5/8 & 1-9/16 & 1-13/16 & 11/32 & . 488 \\
\hline 13/16 & 7/8 & E2628 & 10 & 1-11/16 & 1-13/16 & 23/64 & . 538 \\
\hline 7/8 & 15/16 & E2830 & 10-3/4 & 1-13/16 & 1-15/16 & 3/8 & . 625 \\
\hline 7/8 & 1 & E2832 & 11-1/8 & 1-13/16 & 2 & 13/32 & . 725 \\
\hline 15/16 & 1 & E3032 & 11-1/2 & 1-15/16 & 2-1/16 & 13/32 & . 794 \\
\hline 1 & 1-1/8 & E3236 & 12-5/8 & 2-1/8 & 2-5/16 & 7/16 & 1.030 \\
\hline 1-1/16 & 1-1/8 & E3436 & 12-5/8 & 2-1/8 & 2-5/16 & 7/16 & 1.019 \\
\hline 1-1/16 & 1-1/4 & E3440 & 13-5/8 & 2-1/4 & 2-5/8 & 1/2 & 1.450 \\
\hline 1-1/8 & 1-1/4 & E3640 & 13-5/8 & 2-1/4 & 2-5/8 & 1/2 & 1.450 \\
\hline 1-1/4 & 1-5/16 & E4042 & 14-3/4 & 2-17/32 & 2-7/8 & 17/32 & 1.644 \\
\hline 1-1/4 & 1-3/8 & E4044 & 14-3/4 & 2-17/32 & 2-7/8 & 17/32 & 1.828 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-636a-Type IV-Engineer's Wrench, Double Head, Open End \(15^{\circ}\).

See Section 16 for sets of these streamlined wrenches in boxes and plastic rolls.

\section*{MINIATURE}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Openings \\
(A) \\
(B)
\end{tabular}}} & \multirow[t]{2}{*}{Part No.} & \multirow[t]{2}{*}{Length (L)} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Head Diameter \\
(E) (F)
\end{tabular}}} & \[
\begin{gathered}
\text { Head } \\
\text { Thickness }
\end{gathered}
\] & Weight \\
\hline & & & & & & (T) & Lbs. \\
\hline 3/16 & 7/32 & H10 & 2-1/2 & 25/64 & 29/64 & \(7 / 64\) & . 013 \\
\hline 1/4 & 9/32 & H12 & 3 & 33/64 & 37/64 & 5/32 & . 028 \\
\hline 5/16 & 11/32 & H14 & 3-3/4 & 41/64 & 23/32 & 3/16 & . 047 \\
\hline 3/8 & 7/16 & H16 & 4-3/32 & 25/32 & 57/64 & 7/32 & . 081 \\
\hline 13/32 & 15/32 & H18 & 4-3/32 & 25/32 & 57/64 & 7/32 & . 078 \\
\hline \multicolumn{8}{|l|}{Ref.: Fed. Spec. GGG-W-636a, Type 6, Style D.} \\
\hline
\end{tabular}

\section*{ELECTRICAL}



Ref.: Fed. Spec. GGG-W-636a, Type 6, Class A.

\section*{SPECIAL APPLICATIONS - SEE SECTION 16, PAGE 16 FOR SET}

Listed above are the Bonney miniature wrench and electrical wrench in various sizes. The miniature wrench is ideal for adjustments on generators, radios, distributors, and other parts that are small and have limited space in which to work. The electrical wrench is designed with a 15 degree angle head on one end and a 60 degree angle head on the other end. These wrenches are especially useful for adjustments on accessories and electrical apparatus where small parts and limited space are confronted. Both of these wrenches are drop forged of high grade alloy steel and nickel chrome plated in the usual "quality" manufacturing process always associated with Bonney.

\section*{TAPPET WRENCHES}

The Tappet Wrenches shown below cover the complete range which will serve most adjustments on late model cars and trucks. Sizes ranging from \(7 / 16^{\prime \prime} \times 17 / 32^{\prime \prime}\) through \(15 / 16^{\prime \prime} \times 1^{\prime \prime}\). These wrenches are drop forged and nickel chrome plated. All wrenches are of the pear-shaped head design, extra thin for working in close quarters.


Technical Dafa
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|c|}{Openings} & \multirow[t]{2}{*}{\begin{tabular}{l}
Part \\
No.
\end{tabular}} & \multirow[t]{2}{*}{\begin{tabular}{l}
Length \\
(L)
\end{tabular}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Head Diameter (C) \\
(D)
\end{tabular}}} & Head Thkns. & Welght \\
\hline (A) & (B) & & & & & (T) & Lbs. \\
\hline 7/16 & 17/32 & 420 & 9-1/2 & 1-3/16 & 1-1/4 & 5/32 & . 191 \\
\hline 7/16 & 1/2 & 420A & 9-1/2 & 1-3/16 & 1-1/4 & 5/32 & . 188 \\
\hline 1/2 & 9/16 & 422 & 9-1/2 & 1-3/16 & 1-1/4 & 5/32 & . 184 \\
\hline 5/8 & 11/16 & 424 & 9-1/2 & 1-7/16 & 1-1/2 & 3/16 & . 219 \\
\hline 5/8 & 3/4 & 424A & 9-1/2 & 1-7/16 & 1-1/2 & 3/16 & . 272 \\
\hline 3/4 & 13/16 & 425 & 9-1/2 & 1-5/8 & 1-25/32 & 7/32 & .359 \\
\hline 11/16 & 3/4 & 425A & 9-1/2 & 1-5/8 & 1-25/32 & 7/32 & . 375 \\
\hline 3/4 & 7/8 & 426 & 9-1/2 & 1-5/8 & 1-25/32 & 7/32 & . 344 \\
\hline 15/16 & 1 & 428 & 9-1/2 & 1-15/16 & 2-1/16 & 7/32 & .409 \\
\hline \multicolumn{8}{|l|}{Ref.: Fed. Spec. GGG-W-636a, Type 10, Class 1.} \\
\hline
\end{tabular}

\section*{OPEN END RIGHT ANGLE WRENCHES}

These wrenches are also necessary for refrigeration service work. Mechanics everywhere find these wrenches extremely handy for carburetor work on many makes of cars and trucks. All right angle wrenches are drop forged from high alloy steel and have nickel chrome plated heads.


Technical Data
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|r|}{Openings} & \multirow[t]{2}{*}{Part No.} & \multirow[t]{2}{*}{\begin{tabular}{l}
Length \\
(L)
\end{tabular}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Head Diameter
(C) \\
(D)
\end{tabular}}} & \multirow[t]{2}{*}{Head Thkns. (T)} & \multirow[t]{2}{*}{Weight Lbs.} \\
\hline (A) & (B) & & & & & & \\
\hline 3/8 & 7/16 & 2723 & 4-1/2 & 15/16 & 1-5/32 & \(7 / 32\) & . 119 \\
\hline 1/2 & 9/16 & 2725B & 5-1/2 & 1-1/4 & 1-3/8 & 15/64 & . 181 \\
\hline 5/8 & \(3 / 4\) & 2729 & 7-1/2 & 1-9/16 & 1-21/32 & 5/16 & . 409 \\
\hline
\end{tabular}

Here we show the line of Bonney Open End Service Wrenches with \(30^{\circ}\) angle with extra thin heads for working in tight quarters. The range in sizes from \(3 / 4^{\prime \prime}\) to \(2-3 / 8^{\prime \prime}\) offers a tool for every application desired. These wrenches are manufactured of the finest grade alloy steel with polished heads, nickel chrome plated.

The illustrations at the right incorporate pertinent data as to head thickness, opening size and head diameter which could be important in the special applications for which this wrench could be used.
Especially useful in aircraft applications.


Technical Data
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & & \multicolumn{3}{|c|}{Technical Data} \\
\hline \begin{tabular}{l}
Opening \\
(A)
\end{tabular} & Part No. & Length (L) & \[
\begin{gathered}
\text { Head } \\
\text { Diameter }
\end{gathered}
\]
(B) & Head
Thickness (T) & Weight Lbs. \\
\hline 3/4 & 1224 & 6-1/4 & 1-11/16 & 1/4 & . 219 \\
\hline 1-1/8 & 1224A & 6-7/8 & 1-7/8 & 1/4 & . 281 \\
\hline 13/16 & 1226 & 6-1/4 & 1-11/16 & 1/4 & . 250 \\
\hline 7/8 & 1228 & 6-1/4 & 1-11/16 & 1/4 & . 231 \\
\hline 15/16 & 1230 & 6-7/8 & 1-7/8 & 1/4 & . 294 \\
\hline 1 & 1232 & 6-7/8 & 1-7/8 & 1/4 & . 294 \\
\hline 1-1/32 & 1232A & 6-1/4 & 1-11/16 & 1/4 & . 250 \\
\hline 1-1/16 & 1234 & 6-7/8 & 1-7/8 & 1/4 & . 294 \\
\hline 1-1/8 & 1236 & 7 & 2-1/16 & 1/4 & . 325 \\
\hline 1-5/16 & 1236 S & 7 & 2-1/16 & 1/4 & . 313 \\
\hline 1-3/16 & *1238 & 7 & 2-1/16 & 1/4 & . 325 \\
\hline 1-1/4 & 1240 & 7 & 2-1/16 & 1/4 & . 319 \\
\hline 1-5/16 & 1242 & 7-5/8 & 2-1/2 & 9/32 & . 475 \\
\hline 1-3/8 & 1244 & 7-5/8 & 2-1/2 & 9/32 & . 472 \\
\hline 1-7/16 & 1246 & 7-5/8 & 2-1/2 & 9/32 & . 494 \\
\hline 1-1/2 & 1248 & 7-5/8 & 2-1/2 & 9/32 & . 463 \\
\hline 1-9/16 & 1250 & 7-5/8 & 2-5/8 & 9/32 & . 500 \\
\hline 1-5/8 & 1252 & 7-5/8 & 2-5/8 & 9/32 & . 513 \\
\hline 1-3/4 & 1256 & 8-1/2 & 3-1/8 & 5/16 & . 750 \\
\hline 1-13/16 & 1258 & 8-1/2 & 3-1/8 & 5/16 & . 738 \\
\hline 1-7/8 & 1260 & 8-1/2 & 3-1/8 & 5/16 & . 725 \\
\hline 1-15/16 & 1262 & 8-1/2 & 3-1/8 & 5/16 & . 725 \\
\hline 2 & 1264 & 8-1/2 & 3-1/2 & \(5 / 16\) & . 769 \\
\hline 2-9/16 & 1264 S & 8-1/2 & 3-1/2 & 5/16 & . 675 \\
\hline 2-1/16 & 1266 & 8-1/2 & 3-1/2 & 5/16 & . 756 \\
\hline 2-1/8 & 1268 & 8-1/2 & 3-1/2 & 5/16 & . 744 \\
\hline 2-1/4 & 1272 & 8-1/2 & 3-1/2 & 5/16 & . 744 \\
\hline 2-1 4 & 1272 S & 8-1/2 & 3-1/2 & 5/16 & . 681 \\
\hline 2-3/8 & 1276 & 8-1/2 & 3-1/2 & 5/16 & . 713 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-636a, Type 17, Class 3.
*Also used on caster adjustment on Ford, Lincoln, Mercury.

\section*{SINGLE HEAD SERVICE WRENCHES (THIN HEAD)}

These wrenches have especially thin heads for use in narrow openings. The following wrenches are exceptionally useful in refrigeration work. Wrench \#1964 is used on the Superior packless valve. Wrenches 1252, 1244, 1240, and 1236 are used on Sporlan expansion valves. The thin heads allow access to close quarters, making these wrenches adaptable in aircraft service work.


Technical Data
\begin{tabular}{llllll}
\hline \begin{tabular}{c} 
Opening \\
\((\mathrm{A})\)
\end{tabular} & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Length \\
\((\mathrm{L})\)
\end{tabular} & \begin{tabular}{c} 
Head \\
Diameter \\
\((\mathrm{B})\)
\end{tabular} & \begin{tabular}{c} 
Head \\
Thickness
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline 1 & 1932 & \(12-1 / 4\) & \(2-1 / 2\) & \(1 / 4\) & .694 \\
\hline \(1-1 / 16\) & 1934 & \(12-1 / 4\) & \(2-1 / 2\) & \(1 / 4\) & .656 \\
\hline \(1-1 / 8\) & 1936 & \(12-1 / 4\) & \(2-1 / 2\) & \(1 / 4\) & .644 \\
\hline \(1-1 / 4\) & 1940 & \(12-1 / 4\) & \(2-1 / 2\) & \(1 / 4\) & .625 \\
\hline \(1-3 / 8\) & 1944 & \(12-1 / 4\) & \(2-1 / 2\) & \(1 / 4\) & .625 \\
\hline \(1-7 / 16\) & 1946 & \(12-1 / 4\) & \(2-7 / 8\) & \(9 / 32\) & .788 \\
\hline \(1-1 / 2\) & 1948 & \(12-1 / 4\) & \(2-7 / 8\) & \(9 / 32\) & .756 \\
\hline \(1-9 / 16\) & 1950 & \(12-1 / 4\) & \(2-7 / 8\) & \(9 / 32\) & .738 \\
\hline \(1-5 / 8\) & 1952 & \(12-1 / 4\) & \(2-7 / 8\) & \(9 / 32\) & .725 \\
\hline \(1-11 / 16\) & 1954 & \(12-1 / 4\) & \(2-7 / 8\) & \(9 / 32\) & .731 \\
\hline \(1-3 / 4\) & 1956 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .994 \\
\hline \(1-13 / 16\) & 1958 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .988 \\
\hline \(1-7 / 8\) & 1960 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .956 \\
\hline 2 & 1964 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .950 \\
\hline \(2-1 / 16\) & 1966 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .963 \\
\hline \(2-1 / 8\) & 1968 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .925 \\
\hline \(2-3 / 16\) & 1970 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .925 \\
\hline \(2-1 / 4\) & 1972 & \(12-1 / 4\) & \(3-7 / 16\) & \(5 / 16\) & .925 \\
\hline 12 & & & & & \\
\hline
\end{tabular}

\footnotetext{
Ref.: Fed. Spec. GGG-W-636a, Type 17, Class 2.
}

Shown below is the complete series of Box End, Double Offset Bonney Wrenches with the long shaft. These wrenches are manufactured from top quality alloy steel, drop forged with nickel chrome plated heads for added beauty and durability. These wrenches are made to exacting specifications to assure perfect fit for all applications.


Technical Data
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { Openings } \\
& \text { (A) }
\end{aligned}
\]} & \multirow[t]{2}{*}{\begin{tabular}{c}
\(\begin{array}{c}\text { Part } \\
\text { No. }\end{array}\) \\
\hline 2804 L
\end{tabular}} & \multirow[t]{2}{*}{\[
\begin{gathered}
\begin{array}{c}
\text { Length } \\
(\mathrm{L})
\end{array} \\
\hline 8-1 / 2
\end{gathered}
\]} & \multicolumn{2}{|l|}{\begin{tabular}{l}
Head Diameter \\
(C) \\
(D)
\end{tabular}} & \multirow[t]{2}{*}{\[
\frac{(\mathrm{Ta})}{9 / 32}
\]} & \multirow[t]{2}{*}{\[
\frac{(\mathrm{Tb})}{5 / 16}
\]} & \multirow[t]{2}{*}{Weight Lbs. .181} \\
\hline 3/8 & 7/16 & & & 9/16 & 21/32 & & & \\
\hline 7/16 & 1/2 & 2804 C & 8-3/4 & 21/32 & 47/64 & 5/16 & 11/32 & . 244 \\
\hline 1/2 & 9/16 & 2805L & 9 & 47/64 & 55/64 & 5/16 & 3/8 & . 300 \\
\hline 9/16 & 5/8 & 2806L & 9-1/ & 53/64 & 29/32 & 3/8 & 7/16 & . 369 \\
\hline 5/8 & 3/4 & 2807 & 11 & 29/32 & 1-5/64 & 7/16 & 2 & . 531 \\
\hline 5/8 & 11/16 & 2807A & 11 & 29/32 & 1-5/64 & 7/16 & \(1 / 2\) & . 556 \\
\hline 11/16 & 25/3 & 2808B & 11-1/2 & 1 & 1-1/8 & 1/2 & 9/16 & . 669 \\
\hline \(3 / 4\) & 7/8 & 2808 & 11-1/2 & 1-5/64 & 1-1/4 & 1/2 & 5/8 & . 775 \\
\hline 3/4 & 13/1 & 2808 F & 11-1 & 1-5/64 & 1-11/64 & 1/2 & 9/16 & . 713 \\
\hline 13/16 & 7/8 & 2809 C & 12-1/ & 1-11/64 & 1-1/4 & 1/2 & 9/16 & . 744 \\
\hline 7/8 & 15/16 & 2809 & 12-1/2 & 1-1/4 & 1-11/32 & 5/8 & 21/32 & . 900 \\
\hline 7/8 & 1 & 2810 C & 13-1/ & 1-11/32 & 1-7/16 & 5/8 & 11/16 & 1.106 \\
\hline 15/16 & 1 & 2810 & 13-1/2 & 1-11/64 & 1-7/16 & 5/8 & 11/16 & 1.100 \\
\hline 1 & 1-1/8 & 2811 & 14-1/2 & 1-7/16 & 1-19/32 & 11/16 & \(3 / 4\) & 1.331 \\
\hline 1 & 1-1/16 & 2811A & 14-1/2 & 1-7/16 & 1-19/32 & 11/16 & \(3 / 4\) & 1.469 \\
\hline 1-1/16 & 1-1/4 & 2812B & 16-1/2 & 1-5/8 & 1-55/64 & 13/16 & 7/8 & 2.000 \\
\hline 1-1/16 & 1-1/8 & 2812D & 16-1/2 & 1-5/8 & 1-55/64 & 13/16 & 7/8 & 2.044 \\
\hline 1-1/8 & 1-1/4 & 2812C & 16-1/2 & 1-5/8 & 1-55/64 & 13/16 & 7/8 & 1.975 \\
\hline 1-1/4 & 1-3/8 & 2812 & 18 & 1-49/64 & 2-3/32 & 7/8 & 29/32 & 2.519 \\
\hline 1-1/4 & 1-7/16 & 2812A & 18 & 1-49/64 & 2-3/32 & 7/8 & 29/32 & 2.500 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-636a, Type 1, Class 2.

\begin{tabular}{lccccccc}
\hline \multicolumn{2}{c}{\begin{tabular}{c} 
Openings \\
\((\mathrm{A})\)
\end{tabular}} & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Length \\
\((\mathrm{L})\)
\end{tabular} & \multicolumn{2}{c}{\begin{tabular}{c} 
Head \\
(C)
\end{tabular}} & \begin{tabular}{c} 
Diameter \\
\((\mathrm{D})\)
\end{tabular} & \begin{tabular}{c} 
Head Thickness \\
\((\mathrm{Ta})\)
\end{tabular} \\
\hline \(5 / 16\) & \(3 / 8\) & 2803 & \(4-1 / 2\) & \(15 / 32\) & \(9 / 16\) & \(3 / 16\) & \(7 / 32\) \\
\((\mathrm{~Tb})\) & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline \(3 / 8\) & \(7 / 16\) & 2804 & \(4-3 / 4\) & \(9 / 16\) & \(21 / 32\) & \(1 / 4\) & \(9 / 32\) \\
\hline \(1 / 2\) & \(9 / 16\) & 2805 & \(5-3 / 8\) & \(47 / 64\) & \(53 / 64\) & \(21 / 64\) & \(23 / 64\) \\
\hline \(7 / 16\) & \(1 / 2\) & 2805 A & \(5-1 / 8\) & \(21 / 32\) & \(47 / 64\) & \(19 / 64\) & \(21 / 64\) \\
\hline \(9 / 16\) & \(5 / 8\) & 2806 & \(5-3 / 4\) & \(53 / 64\) & \(29 / 32\) & \(23 / 64\) & \(25 / 64\) \\
\hline \(5 / 8\) & \(3 / 4\) & 2806 B & \(6-3 / 16\) & \(29 / 32\) & \(1-5 / 64\) & \(11 / 32\) & \(13 / 32\) \\
\hline \(5 / 8\) & \(11 / 16\) & 2806 C & 6 & \(29 / 32\) & 1 & \(25 / 64\) & \(27 / 64\) \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-636a, Type 1, Class 2.

\section*{MINIATURE SERIES}
\begin{tabular}{lrccccccc}
\hline \(3 / 16\) & \(13 / 64\) & *E40 & \(2-7 / 8\) & \(19 / 64\) & \(21 / 64\) & \(1 / 8\) & \(9 / 64\) & .009 \\
\hline \(3 / 16\) & \(13 / 64\) & E40A & \(2-7 / 8\) & \(19 / 64\) & \(21 / 64\) & \(1 / 8\) & \(9 / 64\) & .009 \\
\hline \(7 / 32\) & \(15 / 64\) & *E42 & \(3-1 / 8\) & \(11 / 32\) & \(3 / 8\) & \(1 / 8\) & \(9 / 64\) & .019 \\
\hline \(1 / 4\) & \(9 / 32\) & E44 & \(3-3 / 8\) & \(25 / 64\) & \(7 / 16\) & \(9 / 64\) & \(5 / 32\) & .031 \\
\hline \(5 / 16\) & \(11 / 32\) & E46 & \(3-3 / 4\) & \(15 / 32\) & \(35 / 64\) & \(5 / 32\) & \(3 / 16\) & .041 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-636a, Type 1, Class 2, Style B.
*Denotes 6 Point-Others 12 Point.

\section*{SHORT SERIES}

These wrenches are drop forged of high alloy steel and undergo the usual fine craftsmanship in finishing and plating which has been a must at Bonney for over 80 years. The box walls are especially thin but have the usual strength found in Bonney wrenches. See Section 16 for sets.

\section*{MINIATURE SERIES}

These wrenches are designed for working on small parts in limited space, ideal for servicing generator, carburetor and other types of electrical and ignition work. See Section 16 for information on the N80R set of these small wrenches.


\section*{DROP FORGED OF ALLOY STEEL. NICKEL CHROME PLATED WITH POLISHED HEADS}

\section*{Technical Data}

6 PT.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|c|}{Openings} & Part & Length & & meter & & ckness & Weight \\
\hline (A) & (B) & No. & (L) & (C) & (D) & (Ta) & (Tb) & Lbs. \\
\hline 5/16 & 3/8 & 2885 & 4 & 15/32 & 9/16 & 13/64 & 7/32 & . 038 \\
\hline 5/16 & 3/8 & *2885H & 4 & 15/32 & 9/16 & 13/64 & 7/32 & . 044 \\
\hline 3/8 & 7/16 & 2886 & 4-1/2 & 9/16 & 21/32 & 1/4 & 9/32 & . 056 \\
\hline 3/8 & 7/16 & *2886H & 4-1/2 & 9/16 & 21/32 & 1/4 & 9/32 & . 056 \\
\hline 7/16 & 1/2 & 2887 & 5 & 21/32 & 47/64 & 19/64 & 21/64 & . 091 \\
\hline 7/16 & 1/2 & *2887H & 5 & 21/32 & 47/64 & 19/64 & 21/64 & . 097 \\
\hline 1/2 & 9/16 & 2888 & 5-1/2 & 47/64 & 53/64 & 21/64 & 23/64 & . 119 \\
\hline 1/2 & 9/16 & *2888H & 5-1/2 & 47/64 & 53/64 & 21/64 & 23/64 & . 122 \\
\hline 9/16 & 5/8 & 2889 & 6 & 53/64 & 29/32 & 23/64 & 25/64 & . 153 \\
\hline 9/16 & 5/8 & *2889H & 6 & 53/64 & 29/32 & 23/64 & 25/64 & . 163 \\
\hline
\end{tabular}

\section*{\(\leftarrow\)}

Ref.: Fed. Spec. GGG-W-636a, Type 1, Class 1.
THRU
*Denotes 6 Point, others 12 Point.
\begin{tabular}{cllcccccc}
\hline \(3 / 8\) & \(7 / 16\) & 2890 & \(7-5 / 8\) & \(9 / 16\) & \(21 / 32\) & \(7 / 32\) & \(9 / 32\) & .125 \\
\hline \(7 / 16\) & \(1 / 2\) & 2890 C & \(7-3 / 4\) & \(21 / 32\) & \(47 / 64\) & \(9 / 32\) & \(5 / 16\) & .200 \\
\hline \(3 / 8\) & \(7 / 16\) & \(* 2890 \mathrm{H}\) & \(7-5 / 8\) & \(9 / 16\) & \(21 / 32\) & \(7 / 32\) & \(9 / 32\) & .128 \\
\hline \(1 / 2\) & \(9 / 16\) & 2891 & \(8-5 / 8\) & \(47 / 64\) & \(55 / 64\) & \(5 / 16\) & \(3 / 8\) & .033 \\
\hline \(9 / 16\) & \(5 / 8\) & 2891 C & \(9-1 / 4\) & \(53 / 64\) & \(29 / 32\) & \(11 / 32\) & \(3 / 8\) & .322 \\
\hline \(1 / 2\) & \(9 / 16\) & \(* 2891 \mathrm{H}\) & \(8-5 / 8\) & \(47 / 64\) & \(21 / 32\) & \(5 / 16\) & \(3 / 8\) & .303 \\
\hline \(5 / 8\) & \(11 / 16\) & 2892 & \(9-5 / 8\) & \(29 / 32\) & \(1-5 / 64\) & \(3 / 8\) & \(7 / 16\) & .403 \\
\hline \(5 / 8\) & \(3 / 4\) & 2892 B & \(9-5 / 8\) & \(29 / 32\) & \(1-5 / 64\) & \(3 / 8\) & \(7 / 16\) & .403 \\
\hline \(5 / 8\) & \(11 / 16\) & \(* 2892 \mathrm{H}\) & \(9-5 / 8\) & \(29 / 32\) & \(1-5 / 64\) & \(3 / 8\) & \(7 / 16\) & .406 \\
\hline \(3 / 4\) & \(13 / 16\) & 2893 & 11 & \(1-5 / 64\) & \(1 / 1-4\) & \(7 / 16\) & \(15 / 32\) & .569 \\
\hline \(3 / 4\) & \(7 / 8\) & 2893 B & 11 & \(1-5 / 64\) & \(1-1 / 4\) & \(7 / 16\) & \(15 / 32\) & .563 \\
\hline \(7 / 8\) & \(15 / 16\) & 2894 & \(13-1 / 4\) & \(1-11 / 32\) & \(1-7 / 16\) & \(1 / 2\) & \(17 / 32\) & .913 \\
\hline \(7 / 8\) & 1 & 2894 A & \(13-1 / 4\) & \(1-11 / 32\) & \(1-7 / 16\) & \(1 / 2\) & \(17 / 32\) & .881 \\
\hline \(15 / 16\) & 1 & 2894 B & \(13-1 / 4\) & \(1-11 / 32\) & \(1-7 / 16\) & \(1 / 2\) & \(17 / 32\) & .913 \\
\hline \(15 / 16\) & \(1-1 / 16\) & 2895 B & \(14-1 / 2\) & \(1-11 / 32\) & \(1-1 / 2\) & \(1 / 2\) & \(17 / 32\) & 1.100 \\
\hline 1 & \(1-1 / 8\) & 2895 C & \(15-1 / 2\) & \(1-1 / 2\) & \(1-19 / 32\) & \(17 / 32\) & \(9 / 16\) & 1.313 \\
\hline \(1-1 / 16\) & \(1-1 / 4\) & 2895 E & \(15-3 / 4\) & \(1-19 / 32\) & \(1-55 / 64\) & \(19 / 32\) & \(5 / 8\) & 1.538 \\
\hline \(1-1 / 8\) & \(1-3 / 8\) & 2896 & \(16-1 / 16\) & \(1-19 / 32\) & \(1-15 / 16\) & \(5 / 8\) & \(21 / 32\) & 1.588 \\
\hline \(1-1 / 4\) & \(1-7 / 16\) & 2897 & \(18-1 / 16\) & \(1-49 / 64\) & \(2-1 / 64\) & \(11 / 16\) & \(23 / 32\) & 1.975 \\
\hline \(1-5 / 16\) & \(1-1 / 2\) & 2898 & 19 & \(2-1 / 16\) & \(2-5 / 16\) & \(3 / 4\) & \(25 / 32\) & 2.575 \\
\hline \(1-7 / 16\) & \(1-5 / 8\) & 2898 A & 19 & \(2-1 / 16\) & \(2-5 / 16\) & \(3 / 4\) & \(25 / 32\) & 2.400 \\
\hline
\end{tabular}

12 PT. Ref.; Fed. Spec. GGG-W-636a, Type 1, Class 1, Style A.
*Denotes 6 Point-Others 12 Point.

The combination Box End and Open End Wrenches illustrated herein are made of top quality alloy steel drop forged and finished with nickel chrome plating. All of the wrenches in this series are made to exacting specifications and will give long and dependable service. Openings are kept to exacting specifications to assure the usual Bonney quality standards. These wrenches are of the regular length.

Technical Dafa
\begin{tabular}{cclcccc}
\begin{tabular}{c} 
Opening \\
\((\mathrm{A})\)
\end{tabular} & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Length \\
\((\mathrm{L})\)
\end{tabular} & \begin{tabular}{c} 
Head \\
\((\mathrm{E})\)
\end{tabular} & \begin{tabular}{l} 
Diameter \\
\((\mathrm{F})\)
\end{tabular} & \begin{tabular}{c} 
Head \\
\((\) Ta)
\end{tabular} & \begin{tabular}{c} 
Thicknes \\
\((\) Tb)
\end{tabular}
\end{tabular} \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular}

\section*{Ref: Fed. Spec. GGG-W-636a-Type 3. \\ *Single Hex (6 Point) Openings; All Others 12 Point Openings.}

Wrenches up to one inch opening have streamlined design.

\section*{SET INFORMATION}

The above listed tools are drop forged of high grade alloy steel. Nickel chrome plated and highly polished. See Section 16 for information on sets including many of the above listed wrenches.

Shown below are the long series Combination Wrenches in both 6 pt . and 12 pt . openings. Like the regular series shown on page 10 , all of these wrenches are manufactured to the exacting specifications to meet the usual high quality Bonney standards. The long shaft enables the mechanic to reach into tight spots for loosening or tightening applications.


The special wrenches shown above are for ignition and electrical applications. Some of the shafts are bent to by-pass obstructions found in close quarter adjustments. The E6 Wrench is hinged to allow working at peculiar angles. All of these wrenches are made of the finest quality metal incorporated with top craftsmanship.

Technical Data
\begin{tabular}{llllll}
\hline Openings & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & Length & \begin{tabular}{c} 
Thick- \\
ness
\end{tabular} & \begin{tabular}{c} 
Angle \\
Degree
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline \(1 / 4 \times 1 / 4\) & E2 & 2 & \(1 / 8\) & \(22^{\circ}-60^{\circ}\) & .013 \\
\hline \(17 / 64 \times 9 / 32 \times 11 / 32\) & E3 & \(2-1 / 2\) & \(1 / 8\) & \(18^{\circ}\) & .024 \\
\hline \(5 / 16\) & E4 & 3 & \(1 / 8\) & \(30^{\circ}\) (Shaft) & .026 \\
\hline \(5 / 16\) & E5 & \(3-3 / 8\) & \(1 / 8\) & \(\ldots \ldots \ldots\) & .028 \\
\hline \(5 / 16\) & E6 & \(\ldots \ldots\) & \(1 / 8\) & \(\ldots \ldots \ldots\) & .062 \\
\hline \(1 / 4 \times 9 / 32\) & E7 & \(2-7 / 8\) & \(1 / 8\) & \(45^{\circ}\) (Shaft) & .021 \\
\hline \(7 / 32 \times 7 / 16\) & E8 & \(3-3 / 8\) & \(1 / 8\) & \(\cdots^{\prime} \ldots \ldots\) & .041 \\
\hline \(1 / 2\) & E9 & \(3-3 / 8\) & \(1 / 8\) & \(15^{\circ}\) (Shaft) & .053 \\
\hline \(3 / 8 \times 7 / 16\) & E10 & \(3-7 / 8\) & \(1 / 8\) & \(38^{\circ}\) & .060 \\
\hline \(15 / 64 \times 9 / 32\) & E11 & 4 & \(\ldots\) & \(\ldots \ldots \ldots\) & .070 \\
\hline
\end{tabular}

\section*{FLARE NUT WRENCHES}

The Flare Nut Wrenches listed below in 6 and 12 pt. openings are designed for many applications on tubing, such as oil lines and hydraulic lines in many automobiles and machinery.
\begin{tabular}{llllll}
\hline Openings & Part No. & Length & \begin{tabular}{c} 
Slotted \\
Opening
\end{tabular} & \begin{tabular}{c} 
Head \\
Thickness
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline \(3 / 8-1 / 2\) & \(2612-2612 \mathrm{H}^{*}\) & \(4-3 / 4\) & \(13 / 64-21 / 64\) & \(9 / 32-5 / 16\) & .109 \\
\hline \(7 / 16-9 / 16\) & \(2618-1618 \mathrm{H}^{*}\) & \(5-1 / 16\) & \(25 / 64-17 / 64\) & \(5 / 16-11 / 32\) & .138 \\
\hline \(5 / 8-11 / 16\) & \(2630-2630 \mathrm{H}^{*}\) & 6 & \(15 / 32-17 / 32\) & \(3 / 8-13 / 32\) & .213 \\
\hline \(3 / 4-1\) & RF54 & 8 & \(17 / 32-11 / 16\) & \(\ldots \ldots \ldots \ldots\) & .456 \\
\hline \(3 / 4-7 / 8\) & RF54A & 8 & \(17 / 32-5 / 8\) & \(\ldots \ldots \ldots\) & .488 \\
\hline \(7 / 8-1-1 / 8\) & RF55 & \(9-1 / 2\) & \(5 / 8-25 / 32\) & \(\ldots \ldots \ldots\) & .788 \\
\hline \(7 / 8-1\) & RF55A & \(9-1 / 2\) & \(5 / 8-11 / 16\) & \(\ldots \ldots \ldots \ldots\) & .856 \\
\hline
\end{tabular}
*Denotes 6-Point Openings.

\section*{CYLINDER HEAD WRENCHES AND}

TORQUE WRENCH ATTACHMENTS - \(1 / 2\) INCH SQUARE DRIVE
The \(26131 / 2^{\prime \prime}\) drive Cylinder Head Wrench has an opening of \(3 / 4^{\prime \prime}\) to fit many of the Cylinder Head bolts on late model cars. The tool itself is \(5-9 / 16^{\prime \prime}\) long and weighs .444 lbs.

The 2614 Cylinder Head Wrench also used on many late model cars has an opening of \(3 / 4^{\prime \prime}\), is \(5-1 / 2^{\prime \prime}\) long and weighs .688 lbs .

This Cylinder Head Wrench 2615 is designed for use on Buick Cylinder Head Bolts, has an opening of \(5 / 8^{\prime \prime}\) and is \(5-9 / 16^{\prime \prime}\) long and weighs .441 lbs.

The 2615A Cylinder Head Wrench has an opening of \(11 / 16^{\prime \prime}\). Length \(5-9 / 16^{\prime \prime}\) and weighs .469 lbs . This wrench is used with any of the Attachments in \(1 / 2^{\prime \prime}\) Drive.


This Cylinder Head Wrench 2616, in addition to being used as an Attachment for \(1 / 2^{\prime \prime}\) Drive, is also used as a Cylinder Head Wrench for Chevrolet cars. Has an opening size of \(5 / 8^{\prime \prime}\). Length is \(5-3 / 4^{\prime \prime}\) and weighs .519 lbs.

This wrench \#2617 is used as a Cylinder Head Wrench for Ford, Mercury, Pontiac, and Studebaker having an opening of \(11 / 16^{\prime \prime}\). The wrench is \(8-3 / 8^{\prime \prime}\) long and weighs .825 lbs .

\section*{SPINNER WRENCHES}

This series of wrenches has a plastic screwdriver handle and incorporates socket ends ranging from \(3 / 16^{\prime \prime}\) to \(1 / 2^{\prime \prime}\) openings. Very convenient for tightening and loosening nuts and bolts with great speed.


\section*{BRAKE ADJUSTING WRENCHES}

The 2560 Brake Adjusting Wrench has a long handle off-set to provide clearance around oversized tires. The \(3 / 16^{\prime \prime}\) opening fits most standard connections found on Brake Lining Connections.
\(2560-7 / 16^{\prime \prime}\) opening. Length: 14 inches. Weight: . 438 lbs.
The 2561 tool has openings of \(3 / 16^{\prime \prime}\) and \(1 / 4^{\prime \prime}\) designed for adjustment of Bendix Brake eccentrics. Made of alloy steel with polished head, nickel chrome plated.
\(2561-3 / 16^{\prime \prime} \times 1 / 4^{\prime \prime}\) opening. Length: 6-1/4 inches. Weight: . 169 lbs.
This Adjusting Wrench \#2566 is used on the star nut of the two shoe Bendix Brakes.
2566-1/16 inch blade thickness. Length: 7-1/2 inches. Weight: .213 lbs .

Much like the other Brake Wrenches, the 2566A is used for Brake Adjustments on Chevrolet and other close quarter jobs.
2566A - \(1 / 16\) inch blade thickness. Length: 8 inches. Weight: . 209 lbs.
*Note: See Section 10, Page 1 for other Brake Tools.

\section*{DISTRIBUTOR WRENCHES}

The 6508 Distributor Wrench incorporates the bends on off-set to enable convenient application on late model Chevrolets, Pontiacs, Oldsmobiles and Buicks.
\(6508-9 / 16^{\prime \prime}\) opening. Length: 16-3/8 inches. Weight: 671 lbs .
The 6509 Distributor Wrench enables easy application when adjusting the Distributor Nuts on late model Mercurys, Cadillacs, Dodges, Chryslers, Lincolns, Plymouths, DeSotos and Packards.
\(6509-1 / 2^{\prime \prime}\) opening. Length: 18-3/8 inches. Weight: 687 lbs .
The 6510 Wrench has the unique bend which enables the mechanic to properly service late model Fords
\(6510-1 / 2^{\prime \prime}\) opening. Length: \(9-3 / 8\) inches. Weight: .447 lbs .
The 6511 Distributor Wrench is basically the same as 6510 but has a straight end instead of the twist found on the 6510.
\(6511-1 / 2^{\prime \prime}\) opening. Length: \(9-2 / 8\) inches. Weight: 478 lbs.

Bonney Forge \& Tool Works of Alliance, Ohio, has incorporated modern facilities, skilled craftsmanship plus engineering and production coordination, which offers complete services for any "Special" tool request.

To date, Bonney has produced special tools for most industries including aircraft, marine, construction and many others which demand the "unusual" in service and production.

\section*{BONNEY}
\begin{tabular}{ccccc}
\hline \begin{tabular}{c} 
Max. \\
Opening
\end{tabular} & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Length \\
\((\mathrm{L})\)
\end{tabular} & \begin{tabular}{c} 
Head \\
Diameter
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline \(17 / 32\) & BW4 & \(4-1 / 4\) & \(1-3 / 16\) & .119 \\
\hline \(7 / 8\) & BW6 & \(6-3 / 8\) & \(1-13 / 16\) & .281 \\
\hline \(1-1 / 8\) & BW8 & \(8-1 / 8\) & 2 & .419 \\
\hline \(1-5 / 16\) & BW10 & \(10-1 / 8\) & \(2-9 / 16\) & .813 \\
\hline \(1-7 / 16\) & BW12 & \(12-1 / 4\) & 3 & 1.350 \\
\hline \(1-7 / 8\) & BW15 & \(15-5 / 16\) & \(4-5 / 32\) & 1.738 \\
\hline \(2-1 / 16\) & BW18 & \(18-1 / 2\) & \(4-7 / 8\) & 2.356 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-631a, Type 1.


BW PARTS REPAIR KIT
The Kit consists of extra jaws, knurls, pins, and springs. The size of this carton is \(4-1 / 4^{\prime \prime} \times\) \(6-1 / 4^{\prime \prime} \times 1-1 / 2^{\prime \prime}\), weight \(2 \#\).

\begin{tabular}{llccc}
\hline \begin{tabular}{l} 
Maximum \\
Pipe Size
\end{tabular} & Part No. & Length & \begin{tabular}{c} 
Head \\
Diameter
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline \(3 / 4\) & PW6 & \(5-1 / 2\) & \(1-9 / 16\) & .428 \\
\hline 1 & PW8 & \(7-3 / 8\) & \(2-1 / 8\) & .863 \\
\hline \(1-1 / 2\) & PW10 & \(9-3 / 4\) & \(2-1 / 2\) & 1.760 \\
\hline 2 & PW12 & \(11-1 / 2\) & 3 & 2.813 \\
\hline 2 & PW14 & 13 & \(3-1 / 8\) & 3.675 \\
\hline \(2-1 / 2\) & PW18 & \(16-1 / 2\) & \(3-5 / 8\) & 5.887 \\
\hline 3 & PW24 & \(22-1 / 4\) & \(4-1 / 4\) & 9.575 \\
\hline 5 & PW36 & 31 & 5 & 19.313 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W651b, Type 2, Class A.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & \multicolumn{6}{|l|}{} & \\
\hline \multicolumn{8}{|c|}{\begin{tabular}{l}
CAPACITIES AND DIMENSIONS \\
SENSORY TORQUE WRENCH
\end{tabular}} \\
\hline \begin{tabular}{l}
Catalog \\
Number
\end{tabular} & Torque Capacity & \[
\begin{aligned}
& \text { Gradua- } \\
& \text { tions } \\
& \text { in } \\
& \text { Steps of }
\end{aligned}
\] & Drive Square Size (Inches) & Lever Arm Distance (Inches) & \begin{tabular}{l}
Pull \\
Required Max. Scale
\end{tabular} & \begin{tabular}{l}
Overall \\
Length \\
(Inches)
\end{tabular} & \begin{tabular}{l}
Weight \\
(Pounds)
\end{tabular} \\
\hline TS300-I & Inch-Lbs. 0 to 300 & Inch-Lbs. 12-1/2 & 3/8 & 13-1/2 & Pounds & 16 & 2.750 \\
\hline AS300-I & 0 to 300 & 12-1/2 & 1/2 & 13-1/2 & 22.2 & 16 & 2.750 \\
\hline TS600-I & 0 to 600 & 25 & 3/8 & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AS600-I & 0 to 600 & 25 & 1/2 & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AS1200-I & 0 to 1200 & 50 & 1/2 & 15 & 80.0 & 17-1/2 & 2.750 \\
\hline AS1800-I & 0 to 1800 & 50 & 1/2 & 18 & 100.0 & 20-9/16 & 3.750 \\
\hline AS2400-I & 0 to 2400 & 50 & 1/2 & 24 & 100.0 & 28-1/8 & 7.750 \\
\hline RS2400-I & 0 to 2400 & 50 & 3/4 & 24 & 100.0 & 28-1/4 & 7.750 \\
\hline RS3600-I & 0 to 3600 & 100 & 3/4 & 30 & 120.0 & 34-1/4 & 10.750 \\
\hline & Foot-Lbs. & Foot-Lbs. & & & Pounds & & \\
\hline TS25 & 0 to 25 & 1 & 3/8 & 13-1/2 & 22.2 & 16 & 2.750 \\
\hline AS25 & 0 to 25 & 1 & 1/2 & 13-1/2 & 22.2 & 16 & 2.750 \\
\hline TS50 & 0 to 50 & 2-1/2 & \(3 / 8\) & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AS50 & 0 to 50 & 2-1/2 & 1/2 & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AS100 & 0 to 100 & 5 & 1/2 & 15 & 80.0 & 17 & 2.750 \\
\hline AS150 & 0 to 150 & 5 & 1/2 & 18 & 100.0 & 20-9/16 & 3.750 \\
\hline AS200 & 0 to 200 & 5 & 1/2 & 24 & 100.0 & 28-1/8 & 7.750 \\
\hline RS200 & 0 to 200 & 5 & 3/4 & 24 & 100.0 & 28-1/8 & 7.750 \\
\hline RS300 & 0 to 300 & 10 & 3/4 & 30 & 120.0 & 34-1/4 & 10.750 \\
\hline
\end{tabular}

\section*{PLATE BEAM TORQUE WRENCH}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline & Inch-Lbs. & Inch-Lbs. & \multicolumn{5}{|c|}{Pounds} \\
\hline TP300-I & 0 to 300 & 12-1/2 & 3/8 & 13-1/2 & 22.2 & 16 & 2.750 \\
\hline AP300-I & 0 to 300 & 12-1/2 & 1/2 & 13-1/2 & 22.2 & 16 & 2.750 \\
\hline TP600-I & 0 to 600 & 25 & 3/8 & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AP600-I & 0 to 600 & 25 & 1/2 & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AP1200-I & 0 to 1200 & 50 & 1/2 & 15 & 80.0 & 17-1/2 & 2.750 \\
\hline AP1800-I & 0 to 1800 & 50 & 1/2 & 18 & 100.0 & 20-9/16 & 3.750 \\
\hline AP2400-I & 0 to 2400 & 50 & 1/2 & 24 & 100.0 & 28-1/8 & 7.750 \\
\hline RP2400-I & 0 to 2400 & 50 & 3/4 & 24 & 100.0 & 28-1/8 & 7.750 \\
\hline RP3600-I & 0 to 3600 & 100 & 3/4 & 30 & 120.0 & 34-1/4 & 10.750 \\
\hline & Foot-Lbs. & Foot-Lbs. & & & Pounds & & \\
\hline TP25 & 0 to 25 & 1 & 3/8 & 13-1/2 & 22.2 & 16 & 2.750 \\
\hline AP25 & 0 to 25 & 1 & 1/2 & 13-1/2 & 22.2 & 16 & 2.750 \\
\hline TP50 & 0 to 50 & 2-1/2 & 3/8 & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AP50 & 0 to 50 & 2-1/2 & 1/2 & 13-1/2 & 44.4 & 16 & 2.750 \\
\hline AP100 & 0 to 100 & 5 & 1/2 & 15 & 80.0 & 17-1/2 & 2.750 \\
\hline AP150 & 0 to 150 & 5 & 1/2 & 18 & 100.0 & 20-9/16 & 3.750 \\
\hline AP200 & 0 to 200 & 5 & 1/2 & 24 & 100.0 & 28-1/8 & 7.750 \\
\hline RP200 & 0 to 200 & 5 & 3/4 & 24 & 100.0 & 28-1/8 & 7.750 \\
\hline RP300 & 0 to 300 & 10 & 3/4 & 30 & 120.0 & 34-1/4 & 10.750 \\
\hline
\end{tabular}

\section*{CAPACITIES AND DIMENSIONS ROUND BEAM TORQUE WRENCH}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Catalog Number & Torque Capacity & \begin{tabular}{l}
Graduations in \\
Steps of
\end{tabular} & \begin{tabular}{l}
Drive Square \\
Inches)
\end{tabular} & Lever Arm Distance (Inches) & Pull
Required
Max.
Scale & \begin{tabular}{l}
Overall \\
Length \\
(Inches)
\end{tabular} & Weight (Pounds) \\
\hline & Inch-Lbs. & Inch-Lbs. & & & Pounds & & \\
\hline ZA600-I & 0 to 600 & 25 & 1/2 & †13-5/16 & 45.1 & 15-11/16 & 1.250 \\
\hline ZA1200-I & 0 to 1200 & 50 & 1/2 & +16-11/16 & 72.2 & 19-3/16 & 2.0 \\
\hline ZA1800-I & 0 to 1800 & 50 & 1/2 & +16-11/16 & 107.9 & 19-3/16 & 2.125 \\
\hline ZA2400-I & 0 to 2400 & 100 & 1/2 & \(\dagger 19-1 / 4\) & 124.7 & 21-3/4 & 2.500 \\
\hline & Foot-Lbs. & Foot-Lbs. & & & Pounds & & \\
\hline ZA50 & 0 to 50 & 2-1/2 & 1/2 & \(\dagger 13-5 / 16\) & 45.1 & 15-11/16 & 1.250 \\
\hline ZA100 & 0 to 100 & & 1/2 & +16-11/16 & 72.2 & 19-3/16 & 2.0 \\
\hline ZA150 & 0 to 150 & 5 & 1/2 & +16-11/16 & 107.9 & 19-3/16 & 2.125 \\
\hline ZA200 & 0 to 200 & 10 & 1/2 & \(\dagger 19-1 / 4\) & 124.7 & 21-3/4 & 2.500 \\
\hline & Inch-Lbs. & Inch-Lbs. & & & Pounds & & \\
\hline TDR 50-I & 0 to 50 & 2-1/2 & \(3 / 8\) & † 8-17/32 & 5.8 & 9-5/16 & . 750 \\
\hline TDR100-I & 0 to 100 & 5 & 3/8 & + 9-3/16 & 11.0 & 10-1/8 & . 750 \\
\hline TDR200-I & 0 to 200 & 10 & 3/8 & +10-1/8 & 19.9 & 11-1/16 & . 750 \\
\hline TDR300-I & 0 to 300 & 12-1/2 & 3/8 & +12-9/16 & 23.8 & 14-7/8 & 1.250 \\
\hline ADR300-I & 0 to 300 & 12-1/2 & 1/2 & +12-9/16 & 23.8 & 14-7/8 & 1.250 \\
\hline & Foot-Lbs. & Foot-Lbs. & & & Pounds & & \\
\hline TDR25-I & 0 to 25 & 1 & 3/8 & †12-9/16 & 23.8 & 14-7/8 & 1.250 \\
\hline ADR25-I & 0 to 25 & 1 & 1/2 & †12-9/16 & 23.8 & 14-7/8 & 1.250 \\
\hline
\end{tabular}
\(\dagger\) Measure When Computing For Use With Adaptors and Extensions.

\section*{BONNEY SPRING TESTER}

When used in conjunction with a Bonney torque wrench it is possible to check the strength of valve and clutch spring to be in accordance with manufacturers' spring specifications.


SPT

An intricate tone device sounds the instant the spring is compressed to the desired length, which may be pre-set by an adjustment of the spring platform on the threaded column. When making the test, read the scale on the torque wrench as the tone device sounds, and multiply the footpound reading by two (2) and the result is the spring strength in pounds.

\section*{ATTACHMENTS}

An attachment is any shape or form of work-engaging member that functions coaxially with and is attachable to the drive square of the torque wrench.
Common examples of such attachments are ordinary sockets, screwdriver or socket head wrenches. See below:

\section*{SPECIAL ATTACHMENTS}

Less common examples of attachments are illustrated below:
Note that the effective length of the "lever length" (L) remains the same with this type of attachment.


\section*{ADAPTERS}


An adapter is any rigid shape or form of work-engaging member extending longitudinally forward from the axis of, and is attachable to, the drive square of the torque wrench.
Therefore, the length of lever " \(L\) " is increased by the length of the adapter extension.


\section*{EXTENSIONS}


An extension is a rigid bar or shape extending longitudinally from the axis of and is attachable to, the drive square for the purpose of increasing the range of the torque wrench and has at its extremity, a drive square for attachments.


\section*{A GOOD RULE TO REMEMBER Drive Sq.}

An adapter or extension the same length as the lever length of the torque wrench will increase the capacity reading two times (double the reading). An adapter only \(1 / 3\) the lever length of the wrench will increase by \(1-1 / 3\), etc. Many errors have been made by not using this formula.

\footnotetext{
*Not cataloged items
}

\section*{BOLT TORQUE}

The following is an approximate formula for determining the bolt torque:
\[
\begin{aligned}
& \mathrm{T}=.2 \mathrm{DL} \\
& \mathrm{~T}=\text { Torque inch-pounds } \\
& \mathrm{D}=\text { Bolt Diameter (inch) } \\
& \mathrm{L}=\text { Load (pounds) }
\end{aligned}
\]

The above formula is approximate and was derived from tests on bolts from \(1 / 4^{\prime \prime}\) diameter to \(1^{\prime \prime}\) diameter. There are many factors which affect the torque-tension ratio. Every torque specification should be checked experimentally before torque values are established.

\section*{CODE FOR BONNEY TORQUE WRENCHES}
_-First Letter of Prefix—Drive Square Size:
T-3/8" Drive
A-1/2" Drive
R—3/4" Drive
_-Second Letter Prefix-Type of Wrench:
P-Plate or Flat Beam
S-Sensory Wrench
DR-Double Round Beam

A P 1001
_Indicates Wrench Calibrated in Inch-Pound

Indicates Maximum Capacity of Wrench in Foot-Pounds Unless Inch-Pounds Are Indicated by (I) Suffix

NOTE: All Wrenches Are Calibrated from 0 to Maximum Capacity.

\section*{WHAT DOES "TORQUE" MEAN?}

Torque is basically the "twisting" action at a given point. In the drawing below we see a torque wrench designed to measure this action or force applied to bolts, spark plugs, adjustment levers, etc.


The "force or pull" exerted by the mechanic is illustrated as "F." The lever length of the wrench (distance between the centerline of the square drive and the centerline of the force being applied at the handle) indicated as "L."

The curved arrow "TW" represents the torque being applied. To calculate the torque at the square drive it is necessary to multiply the lever length "L" times the force " F " (shown in the following formula).
\[
\begin{array}{lll} 
& \mathrm{TW}=\mathrm{F} \times \mathrm{L} & \\
\text { TW (TORQUE) } & \mathrm{F}(\mathrm{FORCE}) & \text { L (LEVER LENGTH) }
\end{array}
\]

\section*{CONVERSION FORMULA}

It often is advantageous to change a torque specification from inch-pounds to foot-pounds . . . inchpounds to inch-ounces . . . inch-ounces to inch-grams . . . or inch-grams to inchounces.


Since there are twelve inches to a foot then it is evident that one foot-pound equals 12"-pounds.

Foot-Pounds \(\times 12=\) Inch-Pounds
Inch-Pounds \(\div 12=\) Foot-Pounds
Since there are 16 ounces to a pound the formulas for converting inch-pounds and inch-ounces are;

Inch-Pounds \(\times 16=\) Inch-Ounces
Inch-Ounces \(\div 16=\) Inch-Pounds

Since there are 28.35 grams to an ounce the formulas for converting inch-ounces and inch-grams are;
\[
\begin{aligned}
& \text { Inch-Ounces } \times 28.35=\text { Inch-Grams } \\
& \text { Inch-Grams } \div 28.35=\text { Inch-Ounces }
\end{aligned}
\]

Remember, when the elastic limit of steel or other metals is exceeded, the object will take a permanent set and will not return to its original shape. This is the reason "torque measurement" is so important.

\section*{ROUND SHANK BOLSTER SCREWDRIVER-COMPOSITION HANDLE}

These blades are one piece solid, forced into handles against the upset shoulder to insure an extra tight fit. The blades are heat treated, handles are of transparent non-conducting composition.
\begin{tabular}{lccccc}
\hline \begin{tabular}{l} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Blade \\
Length
\end{tabular} & \begin{tabular}{c} 
Tip \\
Width
\end{tabular} & \begin{tabular}{c} 
Shank \\
Width
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline 04 & 4 & \(1 / 4\) & \(1 / 4\) & \(7-3 / 4\) & .191 \\
\hline 06 & 6 & \(5 / 16\) & \(5 / 16\) & \(10-1 / 2\) & .322 \\
\hline 08 & 8 & \(3 / 8\) & \(3 / 8\) & 13 & .500 \\
\hline 010 & 10 & \(7 / 16\) & \(7 / 16\) & 15 & .681 \\
\hline 012 & 12 & \(3 / 8\) & \(3 / 8\) & \(17-1 / 2\) & .831 \\
\hline \multicolumn{6}{l}{ Ref.: Fed. Spec. GGG-S-121c, Type 1, Class 5, Style 1. } \\
\hline
\end{tabular}

\section*{POCKET SCREWDRIVER-COMPOSITION HANDLE-ROUND SHANK}

This screwdriver will answer many of the problems encountered by the everyday mechanic. The handy clip holds the screwdriver in the pocket. The blade is forged and the handle is made of transparent non-conducting composition.
\begin{tabular}{lccccc}
\hline \begin{tabular}{l} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Blade \\
Length
\end{tabular} & \begin{tabular}{c} 
Tip \\
Width
\end{tabular} & \begin{tabular}{c} 
Shank \\
Width
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline \(001-2\) & 2 & \(1 / 8\) & \(1 / 8\) & \(4-5 / 16\) & .025 \\
\hline \(001-3\) & 3 & \(1 / 8\) & \(1 / 8\) & 6 & .028 \\
\hline \(001-5\) & 5 & \(5 / 32\) & \(1 / 8\) & 6 & .041 \\
\hline \(001-6\) & 6 & \(5 / 32\) & \(1 / 8\) & 9 & .044 \\
\hline \multicolumn{5}{l}{ Ref.: } & Fed. \\
\hline
\end{tabular}


SPARK TESTER-NEON TUBE-COMPOSITION HANDLE
Especially handy for the mechanic when testing spark plugs. The tip is magnetized and a wire guard slides over the tip to protect the pocket. A handy pocket clip is also furnished.


The neon tube incorporated in this tough composition handle is especially useful for automobile and electrical work. This screwdriver will really take a beating. When testing spark gap, the neon tube lights to a brilliant orange flash. If there is either no flash or a "stringy" flash, the plug is badly fouled. Replacement neon tubes E03B are available.
\begin{tabular}{cccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Blade \\
Length
\end{tabular} & \begin{tabular}{c} 
Tip \\
Width
\end{tabular} & \begin{tabular}{c} 
Shank \\
Width
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline E02 & \(2-1 / 4\) & \(1 / 8\) & \(3 / 32\) & \(5-1 / 4\) & .062 \\
\hline E03 & \(3-1 / 8\) & \(3 / 16\) & \(5 / 32\) & \(6-5 / 8\) & .106 \\
\hline
\end{tabular}

\section*{CLUTCH HEAD SCREWDRIVER}

These screwdrivers are carefully heat treated and the finest alloy steel is used to withstand hard treatment. Handles are made of nonconducting transparent material.
\begin{tabular}{cclccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Bit \\
Size
\end{tabular} & \begin{tabular}{c} 
Blade \\
Length
\end{tabular} & \begin{tabular}{c} 
Shank \\
Width
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline CL3 & \(5 / 32\) & 4 & \(1 / 4\) & \(7-1 / 2\) & .156 \\
\hline CL5 & \(1 / 4\) & 6 & \(5 / 16\) & \(10-1 / 4\) & .313 \\
\hline CL6 & \(9 / 32\) & \(6-3 / 8\) & \(5 / 16\) & \(10-3 / 8\) & .306 \\
\hline CL7 & \(5 / 16\) & 6 & \(3 / 8\) & \(10-7 / 8\) & .450 \\
\hline CL13 & \(5 / 32\) & \(1-3 / 4\) & \(1 / 4\) & \(3-7 / 8\) & .128 \\
\hline CL15 & \(1 / 4\) & \(1-3 / 4\) & \(1 / 4\) & \(3-7 / 8\) & .125 \\
\hline
\end{tabular}

\section*{PHILLIPS TYPE-ROUND SHANK-COMPOSITION HANDLE}

The handles are made of non-conducting material. Blades are drop forged and carefully heat treated. The sizes shown below will take care of all Phillips type screws.
\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Part } \\
& \text { No }
\end{aligned}
\] & \[
\begin{array}{r}
\mathrm{Bl} \\
\text { Length }
\end{array}
\] & de Diam. & Overall Length & Fits These Phillips Screws \\
\hline CP1 & 3 & 3/16 & 6 & \# 4 \& Smaller Wood Screws, All Types. \# 4 \& Smaller Mach. Screws, All Types. \# 4 Sheet Metal Screws, Flat, Oval, Fillister. \#4 \& \# 5 Sheet Metal Screws, Round Head. \(1 / 8^{\prime \prime}\) Stove Bolts, Round Head. \\
\hline CP2 & 4 & 1/4 & 7-3/4 & \[
\begin{aligned}
& \text { \#5 to \#9 Wood Screws, Flat and Oval. } \\
& \# 5 \text { to \#10 Wood Screws, Fillister and Round. } \\
& \# 5 \text { to } \# 10 \text { Mach. Screws, All Types. } \\
& \# 5 \text { to \#10 Sheet Metal Screws, Flat, Oval, Fillister. } \\
& \# 6 \text { to } \# 12 \text { Sheet Metal Screws, Round Head. } \\
& 1 / 8^{\prime \prime} \text { to } 3 / 16^{\prime \prime} \text { Stove Bolts, Flat, Oval, Fillister. } \\
& 5 / 32^{\prime \prime} \text { to } 3 / 16^{\prime \prime} \text { Stove Bolts, Round Head. }
\end{aligned}
\] \\
\hline CP3 & 6 & 5/16 & 10-1/4 & \[
\begin{aligned}
& \text { \#10 to \#16 Wood Screws, Flat and Oval. } \\
& \text { \# } 11 \text { to \#16 Wood Screws, Round and Fillister. } \\
& \text { \#12 \& } 1 / 4^{\prime \prime} \text { Machine Screws, Flat, Oval and Binding. } \\
& \text { \# } 12 \text { to } 5 / 16^{\prime \prime} \text { Machine Screws, Round and Fillister. } \\
& \text { \# } 12 \text { to \# } 14 \text { Sheet Metal Screws, Flat, Oval, Fillister. } \\
& \text { \#14 Sheet Metal Screws, Round Head. }
\end{aligned}
\] \\
\hline CP4 & 8 & 3/8 & 121/2 & \[
\begin{aligned}
& \text { \#18 and Larger, Wood Screws, All Types. } \\
& 5 / 16^{\prime \prime} \& ~ L a r g e r, ' M a c h i n e ~ S c r e w s, ~ F l a t, ~ O v a l, ~ B i n d i n g . ~ \\
& 3 / 8^{\prime \prime} \& \& \text { Larger, Machine Screws, Round and Fillister. } \\
& 3 / 8^{\prime \prime} \& 1 / 2^{\prime \prime} \text { Stove Bolts, All Types. }
\end{aligned}
\] \\
\hline
\end{tabular}

\section*{STUBBY-SQUARE SHANK-COMPOSITION HANDLE}

This handle is designed to fit comfortably in the hand and is of transparent non-conducting composition. This is truly an exceptionally strong screwdriver used for fine adjustments.


S01-S02
\begin{tabular}{cccccc}
\hline \begin{tabular}{l} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Blade \\
Length
\end{tabular} & \begin{tabular}{c} 
Tip \\
Width
\end{tabular} & \begin{tabular}{c} 
Shank \\
Width
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline SO1 & \(1-3 / 4\) & \(1 / 4\) & \(1 / 4\) & \(3-3 / 4\) & .116 \\
\hline SO2 & 1 & \(1 / 4\) & \(7 / 32\) & \(2-3 / 4\) & .050 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-S-121c, Type 1, Class 3.

\section*{SQUARE SHANK-BOLSTER-COMPOSITION HANDLE}


\section*{ROUND SHANK, WOOD HANDL:--BOLSTER-BLADE}


OFFSET SCREWDRIVERS FOR CLOSE QUARTER WORK
These offset screwdrivers are exceptionally handy for tight quarters where obstructions will not permit standard screwdrivers.
\(0669-4-7 / 8\) inches long. Tip \(1 / 4\) inch wide.
\(0670-5-3 / 8\) inches long. Tip \(5 / 16\) inch wide.
\(0671-5-7 / 8\) inches long. Tip \(3 / 8\) inch wide.

Bonney offers a wide variety of pliers to meet most any requirement. On the following pages are listed the various types with all pertinent specifications.

\section*{B6, B8, B10 COMBINATION PLIERS}

These pliers are built for dependable service, forged, heat treated, and plated under exacting specifications.
\begin{tabular}{ccc} 
Part No. & Length & Weight, Lbs. \\
\hline B6 & \(6^{\prime \prime}\) & .443 \\
B8 & \(8^{\prime \prime}\) & .557 \\
B10 & \(10^{\prime \prime}\) & 1.109 \\
\hline
\end{tabular}


\section*{B18 HEAVY DUTY DIA. CUTTING PLIER}

Specially heat treated cutting edge gives long, dependable service.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B18 & \(7^{\prime \prime}\) & .531 \\
\hline Ref.: & Fed. Spec. GGG-P-471a, Type H, Class 2. \\
\hline
\end{tabular}

\section*{B20 BATTERY PLIER}

The jaws of this plier are deeply serrated to insure the best grip on terminal connections.
\begin{tabular}{ccc} 
Part No. & Length & Weight, Lbs. \\
\hline B20 & \(8^{\prime \prime}\) & .531
\end{tabular}

Ref.: Fed. Spec. GGG-P-471a, Type D.

\section*{B21 LOCK RING PLIER}

Especially designed to remove and install lock or snap rings.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B21 & \(7-3 / 4^{\prime \prime}\) & .406 \\
\hline
\end{tabular}

\section*{B22, B23 LINEMAN'S PLIERS}

A very handy plier for most all wiring jobs.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B22 & \(6^{\prime \prime}\) & .466 \\
B23 & \(8^{\prime \prime}\) & .956 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-P-471a, Type N.

\section*{B25 LONG NOSE SIDE CUTTING PLIER}

This plier is especially handy for close quarter work, reaching into tight places.


\section*{B29 THIN NOSE SLIP JOINT SIDE CUTTING PLIER}

This is an all-purpose plier which answers all the requirements for the "do it yourself" man.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B29 & \(7-1 / 2^{\prime \prime}\) & .556 \\
\hline
\end{tabular}

\section*{B30 WIRING PLIER, DUCK BILL}

The square jaws give a tight grip for working in close quarters.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B30 & \(7^{\prime \prime}\) & .303 \\
\hline Ref.: & Fed. Spec. GGG-P-471a, Type Y. & \\
\hline
\end{tabular}

\section*{B33 HOG RING PLIER}

For pinching large rings. Jaws designed for perfect fit. Useful for installing auto seat covers.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B33 & \(7^{\prime \prime}\) & .409 \\
\hline
\end{tabular}

\section*{B35 IGNITION PLIER}

The mechanism is designed to relieve pressure on the bolt.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B35 & \(5^{\prime \prime}\) & .150 \\
\hline
\end{tabular}

\section*{B36, B38, B310 SLIP JOINT PLIERS}

2 position plier with throat-type cutter.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{4}{*}{} & Part No. & Length & Weight, Lbs. \\
\hline & B36 & \(6^{\prime \prime}\) & . 466 \\
\hline & B38 & \(8^{\prime \prime}\) & . 631 \\
\hline & B310 & \(10^{\prime \prime}\) & . 162 \\
\hline
\end{tabular} Ref.: Fed. Spec. GGG-P-471a, Type F, Class 1, Style 1.

\section*{B41 THIN NOSE \(30^{\circ}\) ANGLE SLIP JOINT PLIER}

Designed for special applications, heat treated,
 chromium plated.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B41 & \(6^{\prime \prime}\) & .463 \\
\hline
\end{tabular}

\section*{B42 CURVED LONG NOSE PLIER}

The nose of this plier is specially bent for hard to get at jobs.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B42 & \(6^{\prime \prime}\) & .294 \\
\hline Ref.: Fed. Spec. & GGG-P-471a, Type T, Class 1. \\
\hline
\end{tabular}

\section*{B43 CORBIN HOSE CLAMP PLIER}

Used with wire self-tightening hose clamps.

\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B43 & \(8^{\prime \prime}\) & .600 \\
\hline
\end{tabular}

\section*{B44 SLIP JOINT IGNITION PLIER}
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B44 & \(6-1 / 2^{\prime \prime}\) & .341 \\
\hline Ref.: Fed. Spec. GGG-P-471a, Type E, Class 1. \\
\hline
\end{tabular}


\section*{B56 THIN STRAIGHT NOSE SLIP JOINT PLIER}

Special design allows gripping action in tight spots.
\begin{tabular}{ccc}
\hline Part No. & Length & Weight, Lbs. \\
\hline B56 & \(6^{\prime \prime}\) & .488 \\
\hline Ref.: & Fed. Spec. GGG-P-471a, Type F, Class 2, Style 1. \\
\hline
\end{tabular}

\section*{B100 PLIER WRENCH with "Quick" release}

Gives positive gripping on irregular objects. Easily adjusted with locking hinged lower jaw. 7" overall length. Weight (Pounds) .588.
Ref.: Fed. Spec. GGG-P-471a, Type U, Class 1, Style 1.

\section*{B102 PLIER WRENCH with "Quick" release}

Gives positive gripping on irregular objects. Easily adjusted with locking hinged lower jaw. \(10^{\prime \prime}\) overall length. Weight (Pounds) 1.244.
Ref.: Fed. Spec. GGG-P-471a, Type U, Class 1, Style 1.


\section*{B50, B51, B52 BONNEY METAL SNIPS}

The jaws are 2-1/2" long, handle 6-3/4" long, overall length \(9-3 / 4^{\prime \prime}\). Finished in 3 styles:
B50 for right hand cutting. Weight (Pounds) . 888
B51 for left hand cutting. Weight (Pounds) . 172
B52 universal, for right or left cuts.
Weight (Pounds) . 900


Bonney chisels are forged of special alloy steel and carefully heat treated to give maximum strength and durability. The bits are hard enough to work on any untempered metal and still soft enough to be resharpened with a file. See section 16, page 18 for sets.

\section*{FLAT CHISELS}
\begin{tabular}{ccccc}
\hline Part No. & \begin{tabular}{c} 
Width of Cut \\
(B)
\end{tabular} & \begin{tabular}{c} 
Stock Dia. \\
(A)
\end{tabular} & \begin{tabular}{c} 
Length \\
\((\mathrm{L})\)
\end{tabular} & Weight, Lbs. \\
\hline C1 & \(5 / 16\) & \(1 / 4\) & 5 & .062 \\
\hline C2 & \(7 / 16\) & \(3 / 8\) & \(5-1 / 2\) & .163 \\
\hline C2A & \(1 / 2\) & \(7 / 16\) & 6 & .244 \\
\hline C3 & \(5 / 8\) & \(1 / 2\) & 6 & .328 \\
\hline C4 & \(3 / 4\) & \(5 / 8\) & \(6-1 / 2\) & .563 \\
\hline C5 & \(7 / 8\) & \(3 / 4\) & \(7-1 / 2\) & .838 \\
\hline C6 & 1 & \(7 / 8\) & 8 & 1.269 \\
\hline C7 & \(1-1 / 4\) & 1 & \(8-1 / 2\) & 1.708 \\
\hline Ref.: Fed. Spec. GGG-C-313a, Type 4, Class 1, Regular Length. & \\
\hline \multicolumn{5}{l}{} \\
\hline \multicolumn{5}{l}{} \\
\hline
\end{tabular}

Important facts about chisel grinding. Avoid grinding with a machine, this can cause excessive heat which will destroy the temper of the chisel. The best method is with a file using a rocking or curved stroke, thus avoiding cutting too much metal. A properly "dressed" cutting edge should have a rounded appearance (convex) instead of a concave appearance.
LONG
\begin{tabular}{ccccc}
\hline Part No. & \begin{tabular}{c} 
Width of Cut \\
\((\mathrm{B})\)
\end{tabular} & \begin{tabular}{c} 
Stock Dia. \\
\((\mathrm{A})\)
\end{tabular} & \begin{tabular}{c} 
Length \\
\((\mathrm{L})\)
\end{tabular} & Weight, Lbs. \\
\hline C10 & \(7 / 8\) & \(3 / 4\) & 14 & 1.688 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-C-313a, Type 4, Class 2, Long.
CAPE CHISELS
\begin{tabular}{lllll} 
C12 & \(1 / 4\) & \(1 / 2\) & 6 & .294 \\
C13 & \(3 / 8\) & \(5 / 8\) & 7 & .513
\end{tabular}

Ref.: Fed. Spec. GGG-C-313a, Type 1, Style A.
DIAMOND POINT
\begin{tabular}{lrrll} 
C15 & \(1 / 4\) & \(1 / 2\) & \(6-1 / 4\) & .328 \\
C16 & \(5 / 16\) & \(5 / 8\) & 7 & .569
\end{tabular}

Ref.: Fed. Spec. GGG-C-313a, Type 11, Style A.
ROUND NOSE
\begin{tabular}{ccccc}
\hline C18 & \(1 / 4\) & \(1 / 2\) & 6 & .294 \\
\hline C 19 & \(3 / 8\) & \(5 / 8\) & 7 & .513 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-C-313a, Type 6, Class 1.

\section*{SOLID PUNCHES}
\begin{tabular}{rrrrr}
\hline C21 & \(1 / 16\) & \(3 / 8\) & \(5-1 / 4\) & .141 \\
\hline C22 & \(1 / 8\) & \(9 / 16\) & \(6-1 / 4\) & .291 \\
\hline C23 & \(3 / 16\) & \(5 / 8\) & 7 & .506 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-P-831a, Type 9, Class A.

\section*{LONG TAPER PUNCHES}
\begin{tabular}{ccccc}
\hline C25 & \(5 / 32\) & \(3 / 8\) & \(8-3 / 16\) & .209 \\
\hline C 26 & \(3 / 16\) & \(1 / 2\) & 9 & .406 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-P-831a, Type 9, Class B.

\section*{PIN PUNCH}
\begin{tabular}{lrlll} 
C28 & \(1 / 8\) & \(3 / 8\) & 5 & .138 \\
C29 & \(3 / 16\) & \(1 / 2\) & \(6-1 / 4\) & .241 \\
C30 & \(1 / 4\) & \(5 / 8\) & 7 & .431
\end{tabular}

Ref.: Fed. Spec. GGG-P-831a, Type 8, Class A.

\section*{PRICK PUNCH}

Ref.: Fed. Spec. GGG-P-831a, Type 10.

\section*{CENTER PUNCH}
C34 \(\quad 3 / 8 \quad 5 \quad .144\)

Ref.: Fed. Spec. GGG-P-831a, Type 2, Class A.
RIVET BUSTER
\begin{tabular}{lllll} 
C36 & \(5 / 8\) & \(3 / 4\) & 12 & 1.738
\end{tabular}
-

Bonney hammers are designed to give long life and maximum service. See Section 8 for information on various hammers used in body and fender work.

\section*{BALL PEIN HAMMER}

These hammer heads are drop forged from special hammer steel, handles made of straight grained hickory.
\begin{tabular}{cccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Head \\
Length
\end{tabular} & \begin{tabular}{c} 
Regular Head \\
Dia.
\end{tabular} & \begin{tabular}{c} 
Ball Pein \\
Dia.
\end{tabular} & \begin{tabular}{c} 
Weight \\
Ounces
\end{tabular} \\
\hline PH2 & \(9-3 / 8\) & \(2-1 / 8\) & \(19 / 32\) & \(17 / 32\) & 4 \\
\hline PH5 & \(11-3 / 4\) & \(3-3 / 8\) & 1 & \(7 / 8\) & 8 \\
\hline PH6 & 13 & \(3-11 / 16\) & \(1-1 / 16\) & \(15 / 16\) & 12 \\
\hline PH7 & \(14-1 / 8\) & 4 & \(1-3 / 16\) & 1 & 16 \\
\hline PH9 & 16 & \(4-1 / 2\) & \(1-3 / 8\) & \(1-3 / 16\) & 24 \\
\hline PH10 & 16 & \(4-7 / 8\) & \(1-1 / 2\) & \(1-1 / 4\) & 32 \\
\hline
\end{tabular}

\section*{SOFT FACE HAMMER}

These hammers are especially handy for body and fender repair work for shaping and forming light sheet metal, also for any job requiring the hammer that will not mar finished surfaces for delicate machine parts.
\begin{tabular}{ccccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Tip \\
Diameter
\end{tabular} & \begin{tabular}{c} 
Hammer \\
Weight \\
Ounces
\end{tabular} & \begin{tabular}{c} 
Tip \\
Part No.
\end{tabular} & Description & \begin{tabular}{c} 
Weight \\
Ounce
\end{tabular} \\
\hline PH15 & \(11-5 / 8\) & \(1-1 / 4\) & 8 & PH15TP & Tip for PH15 & \(3 / 4\) \\
\hline PH17 & \(7-3 / 4\) & \(5 / 8\) & \(1-1 / 2\) & PH17TP & Tip for PH17 & \(1 / 8\) \\
\hline PH18 & 9 & \(7 / 8\) & 4 & PH18TP & Tip for PH18 & \(1 / 4\) \\
\hline PH20 & \(11-5 / 8\) & \(1-3 / 8\) & 16 & PH20TP & Tip for PH20 & 1 \\
\hline PH21 & \(12-3 / 4\) & \(1-9 / 16\) & 24 & PH21TP & Tip for PH21 & \(1-1 / 2\) \\
\hline
\end{tabular}

\section*{TIRE \& RIM HAMMER}

Especially designed to make the difficult job of tire changing easier.
\begin{tabular}{ccccc}
\hline Part No. & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Head \\
Length
\end{tabular} & \begin{tabular}{c} 
Head \\
Diameter
\end{tabular} & \begin{tabular}{c} 
Weight \\
Ounces
\end{tabular} \\
\hline PH19 & \(15-1 / 4\) & 5 & \(1-11 / 16\) & 48 \\
\hline
\end{tabular}

\section*{RUBBER MALLET}

This is an especially handy mallet to use on jobs where contact may be made with finished surfaces.
\begin{tabular}{ccccc}
\hline Part No. & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Head \\
Length
\end{tabular} & \begin{tabular}{c} 
Head \\
Diameter
\end{tabular} & \begin{tabular}{c} 
Weight \\
Ounces
\end{tabular} \\
\hline PH30 & 17 & \(5-1 / 4\) & \(2-5 / 8\) & 28 \\
\hline
\end{tabular}

\section*{CLAW HAMMERS}

Hammer number PH35 is made with a curved claw while PH36 is made with straight claw. Both hammer heads are drop forged of high grade steel, polished to give a quality appearance.
\begin{tabular}{ccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Head \\
Length
\end{tabular} & \begin{tabular}{c} 
Head \\
Dia.
\end{tabular} & \begin{tabular}{c} 
Weight \\
Ounces
\end{tabular} \\
\hline PH35 & \(13-1 / 8\) & \(4-15 / 16\) & \(1-1 / 16\) & 16 \\
\hline PH36 & \(13-1 / 8\) & \(5-11 / 16\) & \(1-1 / 16\) & 16 \\
\hline
\end{tabular}

To get the most out of your file, it should be selected with great care to assure proper application to the job. The file is one of the most important tools in the mechanic's tool box.

\section*{Hom to choose a file...}

What type of material are you going to file, and what results are you after? This must be taken into consideration when selecting your files.

Files are made in various shapes to fit the type of job: flat, square hole, round hole, edge, concave or convex surface. Also the size of file is determined by the length of stroke desired in addition to size and location of material to be filed.

When selecting the cut of the file, bear in mind the nature of material and the amount to be removed as well as the finish desired.

\section*{How to measure a file...}

The length of the file is determined by measuring from shoulder (or point where body meets the tang) to the opposite end (or point).


\section*{What tupe of file...}

When choosing a particular type of file, bear in mind that a larger file will have a coarse cut. It is simple to visualize that a smaller file in the same pattern would not be as coarse because of the overall pattern being reduced. Also bear in mind that the same difference always exists between bastard, second cut and smooth cut for any file in any given length.

FEDERAL SPEC. GGG-F-00325
Illustrated below are the five types of files in the Bonney line. The same high quality found in other Bonney tools. Files from 5 inches to 10 inches packaged in dozens. Others packaged in six each.
\begin{tabular}{ccc}
\multicolumn{4}{c}{ Pkg. of 6} \\
\hline \(6^{\prime \prime}\) & \(8^{\prime \prime}\) & \(10^{\prime \prime}\)
\end{tabular}
\begin{tabular}{cccc}
\multicolumn{3}{c}{ Pkg. of 12} & \\
\cline { 1 - 4 } & \(\mathbf{1 2 4}\) & \(\mathbf{1 4} \mathbf{4}^{\prime \prime}\) & Length \\
5.625 & 4.812 & 7.500 & Weight
\end{tabular}

\section*{FLAT FILES (Bastard)}

ROUND FILES (Bastard)
PART No. FRB
HALF-ROUND (Bastard)
PART No. FHB
ROUND FILES (Bastard)
PART No. FRB
HALF-ROUND (Bastard)
PART No. FHB

PART No. FFB

\begin{tabular}{ccc}
. & Pkg. of 6 \\
\hline \(6^{\prime \prime}\) & \(8^{\prime \prime}\) & \(10^{\prime \prime}\) \\
1.625 & 3.250 & 3.500
\end{tabular}

Pkg. of 12

PART No. FHB
\begin{tabular}{ccc}
\multicolumn{3}{c}{ Pkg. of 6} \\
\hline \(\mathbf{6}^{\prime \prime}\) & \(\mathbf{8}^{\prime \prime}\) & \(10^{\prime \prime}\) \\
1.500 & 3.375 & 6.375
\end{tabular}
\begin{tabular}{cr}
\multicolumn{2}{c}{ Pkg. of \(\mathbf{1 2}\)} \\
\hline \(\mathbf{1 2}\) & \(\mathbf{1 4}^{\prime \prime}\) \\
5.375 & 9.0
\end{tabular}

Length Weight

\section*{EXTRA SLIM TAPER FILE PART No. FXST}
\begin{tabular}{cccc}
\multicolumn{3}{c}{ Pkg. of 6} & \\
\hline \(5^{\prime \prime}\) & \(6^{\prime \prime}\) & \(8^{\prime \prime \prime}\) & Length \\
.625 & 1.125 & 2.750 & Weight
\end{tabular}

\section*{FILE HANDLES \#2, \#3, \#4}

These handles are offered in three popular sizes. They are made of wood (unfinished) and are protected against splitting at the tang opening with metal ferrule.

FH2 (SMALL) FOR 5" AND 6" FILES, WEIGHT LBS. . 125 FH3 (MEDIUM) FOR 8" AND 10" FILES, WEIGHT LBS. . 125
FH4 (LARGE) FOR 12", 14" AND 16" FILES, WEIGHT LBS. 187

\section*{\#2624 HACK SAW WITH RED PLASTIC HANDLE}

This rugged hack saw features a durable red plastic pistol grip with curved design to enable a comfortable fit. The frame is adjustable for
8,10 , and \(12^{\prime \prime}\) blades and features 4 index posia comfortable fit. The frame is adjustable for
8,10 , and \(12^{\prime \prime}\) blades and features 4 index positions, attractive nickel-plate finish. Shipping weight lbs. 1.750.

\section*{\#2625 "CLOSE QUARTER" HACK SAW}

Designed for use where clearances do not permit a standard frame, comes equipped with blade. Shipping weight lbs. . 650.


TOOLS

\#2625B BLADES
These blades are available in packages of 10. Shipping weight lbs. . 250 .

\section*{\#2627 HACK SAW FRAME}

Also designed to fit in close places, especially handy for electricians, plumbers, and home mechanics. Shipping weight lbs. . 250.


These \(6^{\prime \prime}\) blades are available in packages of 10. Shipping weight lbs. . 065.

\section*{\#2628 ADJUSTABLE HACK SAW FRAME}

This reinforced frame is adjustable from \(8^{\prime \prime}\) to \(12^{\prime \prime}\), comes equipped with one \(12^{\prime \prime}\) blade. An outstanding feature is that the blades may be faced in any one of four directions. Shipping weight lbs. 1.065 .


\section*{F SERIES, FLEXIBLE HACK SAW BLADES}

These blades are made of tungsten alloy steel with flexible black hardened teeth carefully built and set for cutting. Standard package 10 blades.
\begin{tabular}{ccccccc}
\hline No. & Length & Width & Gauge & \begin{tabular}{c} 
Teeth \\
Per Inch
\end{tabular} & \begin{tabular}{c} 
Blade \\
Series
\end{tabular} & \begin{tabular}{c} 
Weight \\
Per Pkg.
\end{tabular} \\
\hline F1018 & 10 & \(1 / 2\) & .025 & 18 & Coarse & .380 \\
F1024 & 10 & \(1 / 2\) & .025 & 24 & Medium & .380 \\
F1032 & 10 & \(1 / 2\) & .025 & 32 & Fine & .380 \\
F1218 & 12 & \(1 / 2\) & .025 & 18 & Coarse & .450 \\
F1224 & 12 & \(1 / 2\) & .025 & 24 & Medium & .450 \\
F1232 & 12 & \(1 / 2\) & .025 & 32 & Fine & .450 \\
\hline
\end{tabular}

HS SERIES, ALL HARD HACK SAW BLADES
These blades are non-flexible, made of high speed steel used for difficult cutting jobs such as chrome, nickel, and high carbon steel. Standard package 10 blades.
\begin{tabular}{ccccccc}
\hline No. & Length & Width & Gauge & \begin{tabular}{c} 
Teeth \\
Per Inch
\end{tabular} & \begin{tabular}{c} 
Blade \\
Series
\end{tabular} & \begin{tabular}{c} 
Weight \\
Per Pkg.
\end{tabular} \\
\hline HS1018 & 10 & \(1 / 2\) & .025 & 18 & Coarse & .380 \\
HS1024 & 10 & \(1 / 2\) & .025 & 24 & Medium & .380 \\
HS1032 & 10 & \(1 / 2\) & .025 & 32 & Fine & .380 \\
HS1218 & 12 & \(1 / 2\) & .025 & 18 & Coarse & .450 \\
HS1224 & 12 & \(1 / 2\) & .025 & 24 & Medium & .450 \\
HS1232 & 12 & \(1 / 2\) & .025 & 32 & Fine & .450 \\
\hline
\end{tabular}

\section*{F2-TOE DOLLY}

Thinness and length provide easy accessibility to narrow
 pockets. Large, flat face is frequently used in shrinking and dinging flat panels. The flat sides furnish a convenient anvil for repairing flanges. Weight: \(2-1 / 2 \mathrm{lbs}\). Size: \(4-3 / 4^{\prime \prime} \times 2-3 / 8^{\prime \prime}\) x \(1-1 / 8^{\prime \prime}\).
Federal Specifications: GGG-B-481a, Type IV.

\section*{F3-HEEL DOLLY}

Design makes it possible to reach easily into sharp corners
 and wide radii. These features are exclusive to the Heel Dolly and continue its high demand. Weight: 2-1/2 lbs. Size: 3-1/4" x \(2-1 / 2^{\prime \prime} \times 1-7 / 16^{\prime \prime}\).
Federal Specifications: GGG-B-481a, Type III.

\section*{F4-LOW CROWN DOLLY}

Specially designed for use on low-crown panels where medium and high-crown dollies would stretch the metal. Angle between the sides and large face is less than \(90^{\circ}\), which permits this dolly to reach into the corner of a flanged edge. Weight: 3 lbs. Size: \(3-7 / 8^{\prime \prime} \times 2-3 / 4^{\prime \prime} \times 1-5 / 8^{\prime \prime}\).
Federal Specifications: GGG-B-481a, Type VI.

\section*{F5 - WEDGE DOLLY}

Long, slender, general purpose dolly. Widely favored by many body repair men for all-around use. The long, thin lip is very useful in working behind reinforcements. Weight: 3-1/4 lbs. Size: \(5-3 / 4^{\prime \prime} \times 2-3 / 8^{\prime \prime} \times 2-3 / 16^{\prime \prime}\).
Federal Specifications: GGG-B-481a, Type V.

\section*{F6-GENERAL PURPOSE DOLLY}

Provides convenient and comfortable hand hold during heaviest blows. Weight, balance and several differently crowned working faces, together with two beading and flange lips, give this dolly broad general use. Weight: 3 lbs. Size: \(2-7 / 8^{\prime \prime}\) x \(2-3 / 8^{\prime \prime} \times\) 2-1/4".
Federal Specifications: GGG-B-481a, Type I, Style D.

\section*{F7 - UTILITY DOLLY}

High-crown dolly with one narrow beading edge. Thick rounded sides are useful in short radii curves. Wide application of uses in high-crown portions of hoods, fenders and body panels. Weight: 3 lbs. Size: \(3-1 / 8^{\prime \prime} \times 3^{\prime \prime} \times 1-5 / 8^{\prime \prime}\).
Federal Specifications: GGG-B-481a, Type VIII, Style B.

\section*{F14-"WING DING DOLLY"}

\section*{DESIGNED FOR MODERN CAR REPAIRS}

New! The answer to repair problems on high-fin, high-fashion cars! It's a dolly, it's a spoon, it's a pry! Long handle, special contours for working up inside cramped fins. Wide spoon transmits hammer blows over wide area without damaging finish. Husky \(1^{\prime \prime}\) dia. handle. \(19^{\prime \prime}\) overall. Weight: 3-3/4 lbs.

\section*{F13-COMBINATION SPOON}

General purpose fender spoon. Used as dolly behind brackets, inner panels and similar places. Handle offset to give balance when dinging and for long reach. Has high-crown working surface. Weight: 2-3/4 lbs. Face 1-3/4" x 5-1/2". Handle \(1^{\prime \prime}\) octagon 4-3/4" long.

\section*{F15-LONG CURVED SPOON}

Long, thin, curved blade is handy for prying up dents behind curved reinforcements in header panels, hinge anchors in doors, body pillars and reinforcements in hoods and radiator shells. Weight: \(\mathbf{1 - 1 / 2} \mathrm{lbs}\). Length \(10-1 / 2^{\prime \prime}\) overall. Face \(2^{\prime \prime} \times 7^{\prime \prime}\).

\section*{F16-LIGHT DINGING SPOON}

To ding ridges smooth and level. When held against ridge and struck with hammer, spreads blow over large area making smooth job and preventing damage to metal or finish. Not made for prying. Weight: 11 oz . Length \(10^{\prime \prime}\) overall. Face \(2^{\prime \prime} \times 4-5 / 16^{\prime \prime}\).

\section*{F25 FLEXIBLE FILE BLADE (14 INCHES LONG)}

For filing soft metals, this body file blade designed on the milling cutter principle. Each tooth has a land and groove, thereby increasing the cutting quality and eliminating the chips and loading. Recommended for sheet steel and auto bodies and fenders. Used with the Bonney file holders. Weight lbs. . 687.

\section*{F31 ADJUSTABLE (FLEXIBLE) FILE HOLDER}

Made of aluminum for long dependable service. Used with 14 -inch flexible file, file can be flexed to match surface to be worked on. Shipping Wt. lbs. 1.437.

\section*{F24 FILE HOLDER (WOODEN)}

A popular file holder made for F25 flexible blade. The special grip assures accurate filing. Shipping Wt. lbs. . 937.


\author{
Ref. Fed. Spec. GGG-H-86a
}

Bonney hammers are made of top quality materials. The heads are drop forged of the finest hammer steel and the handles are made of hickory. Heads are black with polished faces.

\section*{* SEE SETS FB3 AND FB7 IN SET SECTION}

\section*{PH22 BUMPING HAMMER}

HEAD
\begin{tabular}{ccccc} 
& & & & HEAD \\
LENGTH & ROUND FACE & SQUARE & OVERALL & WEIGHT \\
OF HEAD & DIAMETER & FACE & LENGTH & OUNCES \\
\(4-3 / 16^{\prime \prime}\) & \(1-1 / 4^{\prime \prime}\) & \(1-1 / 8^{\prime \prime}\) sq. & \(12^{\prime \prime}\) & 14
\end{tabular}

PH23 LIGHT BUMPING HAMMER
\begin{tabular}{ccccc} 
& & & & HEAD \\
LENGTH & ROUND FACE & SQUARE & OVERALL & WEIGHT \\
OF HEAD & DIAMETER & FACE & LENGTH & OUNCES \\
\(4-1 / 8^{\prime \prime}\) & \(1-1 / 4^{\prime \prime}\) & \(1^{\prime \prime}\) sq. & \(11-1 / 2^{\prime \prime}\) & 9
\end{tabular}

\section*{PH24 DINGING HAMMER}

HEAD
WEIGHT
OUNCES
14


PH25 LIGHT DINGING HAMMER
HEAD
WEIGHT
OUNCES
10
\begin{tabular}{ccccc} 
LENGTH & ROUND FACE & SQUARE & OVERALL & HEAD \\
OF HEAD & DIAMETER & FACE & LENGTH & OUNCES \\
\(6-1 / 2^{\prime \prime}\) & \(1-1 / 4^{\prime \prime}\) & \(1-1 / 16^{\prime \prime}\) sq. & \(11-1 / 2^{\prime \prime}\) & 10
\end{tabular} PH26 SPEC. BUMPING HAMMER
\begin{tabular}{cccc} 
& & HEAD \\
LENGTH & ROUND FACE & OVERALL & WEIGHT \\
OF HEAD & DIAMETER & LENGTH & OUNCES \\
\(4^{\prime \prime}\) & \(1-9 / 16^{\prime \prime}\) & \(12^{\prime \prime}\) & 7
\end{tabular}

\section*{PH27 UPHOLSTERERS' MAGNETIC HAMMER...}
\begin{tabular}{ccc} 
& & HEAD \\
LENGTH & OVERALL & WEIGHT \\
OF HEAD & LENGTH & OUNCES \\
\(5-1 / 2^{\prime \prime}\) & \(12^{\prime \prime}\) & 7
\end{tabular}

\section*{PH31 LONG PICK HAMMER}

> LENGTH
> OF HEAD \(9-1 / 2^{\prime \prime}\)
\[
\begin{array}{cc}
\text { ROUND FACE } & \text { OVERALL } \\
\text { DIAMETER } & \text { LENGTH } \\
1-5 / 8^{\prime \prime} & 12^{\prime \prime}
\end{array}
\]

HEAD WEIGHT OUNCES

\section*{POII CONVERTIBLE GEAR PULLER}

Heavy duty construction and designed for quick changeover to two-arm or three-arm puller as desired. The reversible arms (PO11-5) have a maximum reach of \(3-7 / 8\) inches in depth and up to \(5-1 / 2\) inches spread.
Easy and quick assembly and breakdown made possible by construction of the upper assembly pins (incorporating a ball-detent locking device). The PO11 can be used to replace two separate pullers. For easy identification, component parts have been assigned the following numbers:
\begin{tabular}{ll} 
P011-1 (Hub) & PO11-4 (Pin) \\
P011-2 (Screw) & PO11-5 (Arm-3-1/2" reach) \\
P011-3 (Link) & PO11-6 (Shear Pin)
\end{tabular}

All parts being interchangeable, this puller can be converted to PO11L (shown below) by securing a set of extra arms (PO11L-5). Maximum reach 3-7/8", maximum spread \(5-1 / 2^{\prime \prime}\). Weight lbs. 2.562.

\section*{POIIL CONVERTIBLE PULLER (with long arms)}

This is actually the same puller as PO11 with the exception of longer adjustable arms (PO11L-5) with a maximum reach of \(5-1 / 2^{\prime \prime}\) and a spread up to \(8^{\prime \prime}\).
When purchasing a puller where the longer arms are required, the PO11-5 long arms should be clearly specified. The parts are identified by the following numbers:
PO11-1 (Hub)
PO11-4 (Pin)
P011-2 (Screw) PO11L-5 (Arm-5-1/2" reach) P011-3 (Link) PO11-6 (Shear Pin)
Maximum reach \(5-1 / 2^{\prime \prime}\), maximum spread \(8^{\prime \prime}\). Weight lbs. 3.250.

\section*{PO12 CONVERTIBLE GEAR PULLER}

This heavy duty puller will answer most of the demands of the automotive service shop.
The design of this puller is basically the same as PO11, easily converted into a two- or three-arm puller to meet various job requirements.
An outstanding feature of this puller is the slotted jaws on one end of the reversible arms, for pulling gears which necessitate the use of cap screws in removal. These arms (PO12-5) have a maximum reach of \(5-1 / 2^{\prime \prime}\) and will spread to \(8^{\prime \prime}\).
Parts are identified by the following numbers:
PO12-1 (Hub)
PO12-4 (Pin)
P012-2 (Screw)
PO12-5 (Arm-5-1/2" reach)
PO12-3 (Link)
P012-6 (Shear Pin)
Maximum reach 5-1/2", maximum spread \(8^{\prime \prime}\). Weight lbs. 6.000.

\section*{PO12L CONVERTIBLE GEAR PULLER (with long arms)}


The arms shown here (PO12L-5) are used to convert PO12 unit into the PO12L unit.
These longer arms have a maximum reach of \(8-1 / 2^{\prime \prime}\) depth and spread to \(10^{\prime \prime}\). Here again the choice must be made at the time of purchase for either long or short arms depending on the type of operation.
Parts are identified as follows:
\begin{tabular}{ll} 
P012-1 (Hub) & PO12-4 (Pin) \\
PO12-2 & (Screw) \\
PO12-3 & (Link)
\end{tabular}

Arms for Assembly
PO12L-5
Maximum reach 8-1/2", maximum spread \(10^{\prime \prime}\).
Weight lbs. 7.0.

\section*{P305 TWO-ARM GEAR PULLER}


Especially useful to the refrigeration serviceman, but also covers a great number of applications in automotive and aircraft service.

The unique feature of this puller is the simplicity of its design and construction.

Parts are identified as follows:
P305-1 (Outer Arm)
P305-3 (Forcing Screw) P305-2 (Inner Arm) P305-5 (Pivot Pin)

Maximum reach \(2-3 / 8^{\prime \prime}\), maximum spread \(3-1 / 2^{\prime \prime}\). Weight lbs. 1.625.

\section*{P309 TIMING GEAR PULLER}

For removing timing gears, fan assemblies, vibration dampeners and other parts which are topped to receive cap screws \(3 / 8^{\prime \prime}\) in diameter or less.
Parts for the P309 Puller are identified as follows: P309-1 (Center block 5-1/2" long)
P309-2 (Forcing screw 11-1/2" long)
P309-3 (Cap Screws 2, 3/8"-16 threads per inch-3-1/2")
Maximum reach \(7-1 / 2^{\prime \prime}\), maximum spread \(5-1 / 2^{\prime \prime}\). Weight lbs. 2.750.

\section*{P317 SHOCK LINK \& STABILIZER LINK SEPARATOR}

This forked wedge separation is used to free the tapered links of the shock absorber assembly or the stabilizer assembly from their mountings. The wedge is inserted between the link and the arm of the assembly and loosened by striking the tool.

P317 has a jaw opening of \(5 / 8^{\prime \prime}\) and is \(16^{\prime \prime}\) long. Weight lbs. 2.250.

\section*{P319 PITMAN ARM SEPARATOR}

A forked wedge type separator used to dismount the Pitman arm assembly. Insert wedge between the Pitman arm and the shaft and strike end of tool. P319 has a jaw opening of 1-1/8' and 11-1/4" long. Weight lbs. 1.625. Both these tools, P317 \& P319, can be used for separating most any machined members.

\section*{P325 \& 326 UNIVERSAL WHEEL PULLER \& ADAPTER}

Most of the cars requiring a puller can be covered by P325 and P326. The adjustable legs make it possible to adapt to any hub, regardless of number of studs.

The special Adapter (P326) enables the puller to be used in many additional operations.
 oused in many additional operations.
\[
\begin{array}{lc}
\text { P325 (Hub Puller) } & \text { Shipping Wt. Lbs. } \\
\text { P326 (Adapter) } & \text { Shipping Wt. Lbs. } \\
\text { Paximum spread } 7-1 / 2^{\prime \prime} \text {, maximum reach } 4-7 / 8^{\prime \prime} .
\end{array}
\]

\section*{2553 \& 2554 RIM WRENCHES}

These rim wrenches cover practically all sizes of passenger car and truck wheel nuts. 2553 has 6 point openings of \(3 / 4^{\prime \prime}, 7 / 8^{\prime \prime}, 15 / 16^{\prime \prime}\) and \(13 / 16^{\prime \prime}\) and is \(20^{\prime \prime}\) long. SHIPPING WEIGHT 8 LBS. The 2554 has openings from 4 point to 6 point as follows: \(13 / 16^{\prime \prime} 4\) point, \(7 / 8^{\prime \prime}, 1^{\prime \prime}, 1-1 / 16^{\prime \prime}, 1-3 / 16^{\prime \prime}\), and \(1-1 / 2^{\prime \prime} 6\) point, overall length \(25^{\prime \prime}\). SHIPPING WEIGHT 12 LBS.

\section*{BRAKE SPRING PLIERS}

2681A 2680—Brake spring pliers (patented) designed for easy removal and replacement of internal brake springs. 2680 -Length 12-1/2 inches. Weight .687 lb .
2681-These pliers are much like the 2680 in application but have a prominent hook in the lower jaw which allows better control when removing brake springs. A special socket ( 2681 A ) is available which attaches to the handle. 2681-Length \(12-1 \times 2\) inches. Weight .725 lb .

\section*{BU40B BUSHING DRIVER SET}

This set is designed to drive all passenger car bushings as well as many truck and tractor bushings. Tools are made of alloy steel, hardened and tempered to give the best service. Packaged in metal box. 22 PIECES, SHIPPING WEIGHT 4.063 LBS.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Tool No. & \[
\begin{aligned}
& \text { Bushing } \\
& \text { I.D. }
\end{aligned}
\] & \[
\begin{aligned}
& \text { Drive } \\
& \text { O.D. }
\end{aligned}
\] & Fits Hdl.
\# BU40B & Tool No. & \[
\begin{aligned}
& \text { Bushing } \\
& \text { I.D. }
\end{aligned}
\] & \[
\begin{aligned}
& \text { Drive } \\
& \text { O.D. }
\end{aligned}
\] & \[
\begin{aligned}
& \text { Fits Hdl. } \\
& \text { \# BU40 }
\end{aligned}
\] \\
\hline 40-1A Driver & 3/8 & 7/16 & 42-1, 42-2 & 41-7 Drive & 18 & 1-1/4 & 42-3 \\
\hline 40-2 Driver & 7/16 & 1/2 & 42-1, 42-2 & 41-7A Drive & 1-3/16 & 1-5/16 & 42-3 \\
\hline 40-3 Driver & 1/2 & 9/16 & 42-1, 42-2 & 41-8 Driver & 1-1/4 & 1-3/8 & 42-3 \\
\hline 40-5 Driver & 9/16 & & 42-1, 42-2 & 42-1 Handle & & Dia. \(x\) & " Long \\
\hline 40-7 Driver & 39/64 & 43/64 & 42-1, 42-2 & 42-2 Handle & & Dia. & \\
\hline & 5/8 & 11/16 & & 42-3 Handle & 13/16 & x & \(6^{\prime \prime}\) Lon \\
\hline 40-8 Driver & 5/8 & & 42-1, 42-2 & 43-1 Nut & & 42 & \\
\hline 40-9 Driver & 11/16 & 13/16 & 42-1, 42-2 & 43-2 Nut & & s 42-3 & \\
\hline 41-1 Driver & \(117 / 64\)
\(3 / 4\) & \(55 / 64\)
\(7 / 8\) & 42-3 & 40-7 will dri Bushing. & Chevro & \[
\text { et } \mathrm{Six}
\] & ater \\
\hline 41-2 Driver & 13/16 & 15/16 & 42-3 & 41-1 will dr & Che & & King Bolt \\
\hline 41-3 Driver & 55/64 & 63/64 & 42-3 & Bushing. & & & \\
\hline & & & & 41-3 will dri & ve Che & let & ing \\
\hline 41-4 Driver & 15/16 & 1-1/16 & 42-3 & Bushing & & & \\
\hline 41-5 Driver & & 1-1/8 & 42-3 & (Size . 866 kn & act & ar & hevrolet \\
\hline 41-6 Driver & 1-1/16 & 1-3/16 & 42-3 & piston p & ushin & & \\
\hline \multicolumn{8}{|l|}{\multirow[t]{3}{*}{SCREW STARTERS FOR SLOTHEAD AND PHILLIPS HEAD SCREWS}} \\
\hline & & & & & & & \\
\hline & & & & & & & \\
\hline \multicolumn{8}{|r|}{These tools provide a positive gripping for starting screws in hard to get at places. The starters for slothead screws feature a spring locking blade while those for the Phillips type have a magnet head which holds the screw in place.} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Blade Head & \[
\begin{aligned}
& \text { Wt. } \\
& \text { Lbs. }
\end{aligned}
\] & Blade Head with Nylon Handles & Wt. Lbs. & Magnet Head & \[
\begin{aligned}
& \text { Wt. } \\
& \text { Lbs. }
\end{aligned}
\] \\
\hline SS25-2-1/2" & 018 & SSN6-6"....... & 031 & SS3-3-1/4" & 031 \\
\hline SS27-5" & 038 & SSN9-9" & 038 & SS6-6-1/4" & 056 \\
\hline SS29-9"1 & 062 & - & & & \\
\hline
\end{tabular}

\section*{NO. K50 BRAKE ADJUSTING GAUGE}

For measuring clearance between brake drum and shoe. 9 blades 4" long \(\times 1 / 4^{\prime \prime}\) wide in the following thicknesses-.002; .004; .005; .006; .007; .008; .010; .012; . 015.
\[
\text { WEIGHT } 6 \text { OZ. (BOX OF SIX) }
\]

\section*{NO. K51 GENERAL PURPOSE GAUGE}

Especially for tappet and ignition work-the most popular gauge on the market. 12 blades \(1-3 / 4^{\prime \prime}\) long \(\times 1 / 4^{\prime \prime}\) wide, 10 blades \(3^{\prime \prime}\) long x \(1 / 2^{\prime \prime}\) wide. Short blades in following thick-nesses-. \(011 ; .012 ; .013 ; .014 ; .015 ; .016 ; .017 ; ~ .018 ; ~ .019 ;\) .020; .022; . 025 . Long blades in following thicknesses-.002; .003; .004; .005; .006; .007; .008; .010; .013; . 015.

WEIGHT \(3 / 4 \mathrm{LB}\). (BOX OF SIX)

\section*{NO. K52 IGNITION GAUGE}

Contains 11 blades \(1-5 / 8^{\prime \prime}\) long x \(1 / 4^{\prime \prime}\) wide and \(3^{\prime \prime}\) point file for ignition, distributor points and spark plugs. Thickness of blades included as follows-.012; .013; .014; .015; .018; .020; . \(022 ;\). \(025 ;\), 028; .032 and .035 . WEIGHT 6 OZ. (BOX OF SIX)

\section*{NO. K53 UNIVERSAL MASTER GAUGE}

Has full range of spacers- 25 blades, each \(3-5 / 16^{\prime \prime}\) long \(\times 1 / 2^{\prime \prime}\) wide in following thicknesses-.0015; .002; .003; .004; .005; .006; .007; .008; .009; .010; 011; .012; .013; .014; .015; .016; .018; .020; .022; .024; .025; .028; .030; .032 and .035 . WEIGHT 1-1/4 LBS. (BOX OF SIX)

\section*{NO. K54 STANDARD FEELER GAUGE}

Contains 10 blades \(3-5 / 16^{\prime \prime}\) long x \(1 / 2^{\prime \prime}\) wide in following sizes-.002; .003; .004; .005; .006; .007; .008; .010; 012 and . 015.
\[
\text { WEIGHT } 1 / 2 \text { LB. (BOX OF SIX) }
\]

\section*{NO. K55 EXTRA LONG FEELER GAUGE}

Exceptionally useful for pistons, etc. Has 8 blades, each 9 " long x \(1 / 2^{\prime \prime}\) wide in the following sizes-.002; .003; .004; .005; .006; .008; .010; . 015 .

WEIGHT 1 LB. (BOX OF SIX)

\section*{NO. K56 SINGLE END FEELER GAUGE STOCK HOLDER}

\section*{(Positive Adjustable Lock)}

Any thickness of feeler gauge stock coils within the handle and can readily be pulled out for use. Any desired length of strip stock or standard \(12^{\prime \prime}\) blades may be used. Positive sliding lock securely holds blades. Made from hard drawn; cold rolled steel and satin nickel plated.
LENGTH 4-1/2"
WEIGHT 1-1/2 OZ.

\section*{NO. K57 SPARK PLUG GAUGE}

Wire Spark Plug Feeler Gauge with electrode bending tool attached. Wires are \(.022, .025, .028, .030, .032, .035, .038\), .040 by \(1-5 / 8^{\prime \prime}\) long. Each wire is in a blade type holder with the size stamped on it for easy identification.

WEIGHT 7-1/2 OZ. (BOX OF SIX)

\section*{K58 FEELER GAUGE FOR FORDS}


Designed to fit practically any holder, the \(3-5 / 16^{\prime \prime}\) blades are available in all the popular range of thicknesses and with hole for insertion in gauges. The \(12^{\prime \prime}\) lengths are popular for use in the No. K56 Stock Holder which makes the blades usable to the end. Both \(3-5 / 16^{\prime \prime}\) and \(12^{\prime \prime}\) blades are packed 6 in a cellophane envelope. Sizes are listed below.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{6}{|c|}{\begin{tabular}{l}
FEELER GAUGES-Pk. of 6 \\
Wt. per 10 packages \\
1/2" \(\times 3-1 / 2^{\prime \prime}\) Blades
\end{tabular}} & \multicolumn{6}{|l|}{LARGE FEELER GAUGES-Pk. of 6 Wt. per 10 packages 1/2" x 12" Blades} \\
\hline No. & Thkns. & Wt. & No. & Thkns. & Wt. & No. & Thkns. & Wt. & No. & Thkns. & \\
\hline K0015 & . 0015 & . 006 & K019 & . 019 & . 050 & KL0015 & . 0015 & . 019 & KL016 & . 016 & 15 \\
\hline K002 & . 002 & . 006 & K019B & . 019 & . 050 & KL002 & . 002 & . 022 & KL017 & . 017 & 17 \\
\hline K003 & . 003 & . 009 & K020 & . 020 & . 053 & KL003 & . 003 & . 031 & KL018 & . 018 & 18 \\
\hline K004 & . 004 & . 013 & K021 & . 021 & . 056 & KL004 & . 004 & . 044 & KL019 & . 019 & . 18 \\
\hline K005 & . 005 & . 016 & K021B & . 021 & . 056 & KL005 & . 005 & . 050 & KL020 & . 020 & . 20 \\
\hline K006 & . 006 & . 019 & K022 & . 022 & . 059 & KL006 & . 006 & . 066 & KL021 & . 021 & 21 \\
\hline K007 & . 007 & . 022 & K024 & . 024 & . 063 & KL007 & . 007 & . 069 & KL022 & . 022 & 22 \\
\hline K008 & . 008 & . 022 & K025 & . 025 & . 066 & KL008 & . 008 & . 081 & KL024 & . 024 & 238 \\
\hline K009 & . 009 & . 028 & K026 & . 026 & . 072 & KL009 & . 009 & . 094 & KL025 & . 025 & 24 \\
\hline K010 & . 011 & . 0231 & K028 & . 028 & . 075 & KL010 & . 010 & . 1100 & KL026 & . 026 & . 26 \\
\hline K012 & . 012 & . 034 & K032 & . 032 & . 084 & KL012 & . 012 & . 122 & KL028 & . 028 & 28 \\
\hline K013 & . 013 & . 034 & K035 & . 035 & . 094 & KL013 & . 013 & . 138 & KL032 & . 032 & . 31 \\
\hline K014 & . 014 & . 038 & K040 & . 040 & . 106 & KL014 & . 014 & . 152 & KL035 & . 035 & . \\
\hline K015 & . 015 & . 041 & K020B & . 020 & . 053 & KL015 & . 015 & . 156 & KL040 & . 040 & \\
\hline K016 & . 016 & . 044 & K024B & . 024 & . 063 & & & & & & \\
\hline K018 & . 018 & . 047 & K025B & . 025 & . 066 & & & & & & \\
\hline K018B & . 018 & . 047 & K026B & . 026 & . 072 & & & & & & \\
\hline
\end{tabular}


\section*{197 PUTTY KNIFE}

Especially handy for removing gaskets, grease, etc. The flexible steel blade and the oval handle give a quality appearance to this putty knife. The blade is \(1-1 / 4^{\prime \prime}\) wide, \(3-3 / 4^{\prime \prime}\) long, over-all length of the knife is \(7-3 / 4^{\prime \prime}\).

WEIGHT LBS. . 094

\section*{THREAD RESTORERS}

TR1 for \(11,12,13,14,16,18,20,24\) threads to inch. Weight lbs. . 375. TR2 for \(9,10,12,16,20,27,28,32\) threads to inch. Weight lbs. . 338. These restorers are fast cutting and do a quick job in restoring battered or damaged threads. Available in the two above sizes, TR1 and TR2.

\section*{TR7 AND TR8}
\begin{tabular}{|c|c|c|c|}
\hline A & \[
\begin{gathered}
\text { TR8 } \\
\text { TR7 }
\end{gathered}
\] & TR8 & \\
\hline Bolt Dia. & S.A.E. Thd. Per In & U.S.S. Thd. Per In & Hexagon Size \\
\hline 1/4 & 28 & 20 & 7/16 \\
\hline 5/16 & 24 & 18 & 1/2 \\
\hline 3/8 & 24 & 16 & 9/16 \\
\hline 7/16 & 20 & 14 & 5/8 \\
\hline 1/2 & 20 & 13 & 3/4 \\
\hline 9/16 & 18 & & \\
\hline 5/8 & 18 & 11 & 15/16 \\
\hline 3/4 & 16 & 10 & 1-1/16 \\
\hline
\end{tabular}

\section*{SER SCREW EXTRACTORS}

Especially useful to remove broken studs or screws up to \(1^{\prime \prime}\) in diameter. To remove the broken object a hole is drilled and the extractor with a left hand thread is screwed in until it grips and turns out the imbedded part.
\begin{tabular}{llccc}
\hline & \begin{tabular}{c} 
Length \\
Overall
\end{tabular} & \begin{tabular}{c} 
Size Drill \\
to Use
\end{tabular} & \begin{tabular}{c} 
For Screw \\
and \\
Bolt Sizes
\end{tabular} & \begin{tabular}{c} 
Wt. \\
Lb.
\end{tabular} \\
No. & \(5 / 64\) & \(3 / 16-1 / 4\) & .009 \\
SE1 & 2 & \(5 / 4 / 8\) & \(7 / 64\) & \(1 / 4-5 / 16\) \\
SE2 & \(2-3 / 8\) & .015 \\
SE3 & \(2-11 / 16\) & \(5 / 32\) & \(5 / 16-7 / 16\) & .031 \\
SE4 & 3 & \(1 / 4\) & \(7 / 16-9 / 16\) & .059 \\
SE5 & \(3-3 / 8\) & \(17 / 64\) & \(9 / 16-3 / 4\) & .097 \\
SE6 & \(3-3 / 4\) & \(13 / 32\) & \(3 / 4-1\) & .200 \\
SER & & & & .447 \\
\hline
\end{tabular}


SER Set is furnished in clear plastic roll, LR5.

\section*{199 SHOP KNIFE}

This knife serves as a multi-purpose tool for any mechanic's kit. Can be used for trimming upholstery, rubber, leather, or for cutting gaskets, shims, cardboard, etc.

WEIGHT LBS. . 253

\section*{199B PACKAGE OF BLADES}


The 199 shop knife comes equipped with 5 blades incased in the handle. Extra blades are furnished in packages of 5 by part No. 199B.

\section*{CS1 CARBON SCRAPER}

The flexibility of the tempered spring steel aids greatly in speeding up carbon scraping jobs. The scraper blade is \(1^{\prime \prime}\) wide.

WEIGHT LBS. . 303

\section*{RC46 RING GROOVE CLEANER \& CUTTING TOOL}

In addition to the cleaning or scraping qualities this tool also is used as a groove deepening tool, has a positive cutter lock. Cutter blades: 3/32" \(1 / 8^{\prime \prime}-5 / 32^{\prime \prime}-3 / 16^{\prime \prime}\).

WEIGHT LBS. . 519
RC47 Performs the same function as the RC46 but has a special cutter blade which enables use on other models of cars. Cutter blades: 5/64" - 3/32" \(5 / 32^{\prime \prime}-3 / 16^{\prime \prime}\).

WEIGHT LBS. . 525

\section*{PISTON RING COMPRESSORS}

Compressor RC41 is held with a friction lock device, whereas \(\mathrm{RC} 43 \mathrm{~A}, \mathrm{RC} 44 \mathrm{~A}\), and RC45A are of the ratchet type. All of these compressors are made of the finest steel available. Easy operating mechanism equipped with wind-up spool with \(1 / 4^{\prime \prime}\) square drive socket and key. The RC41 can be used on power mowers, garden and tractor motors.
\begin{tabular}{lccc}
\hline \multicolumn{1}{c}{ Tool No. } & Size & Length & Wt. Lbs. \\
\hline RC41 & \(1-1 / 2\) to 3 & Single Band & .306 \\
RC43A & \(2-1 / 8\) to 5 & \(3-1 / 2\) & .738 \\
RC44A Ratchet Type & \(3-1 / 2\) to 7 & \(3-1 / 8\) & .813 \\
RC45A Ratchet Type & \(3-1 / 2\) to 7 & \(6-1 / 2\) & 1.638 \\
\hline
\end{tabular}

\section*{HANDY HOLDING TOOLS}

These mechanical fingers are ideal for picking up ob-
Mects that are dropped in tight places and also used for
inserting starting and removing screws in hard to get
at places.

\section*{K26 POCKET MAGNETIC PICK-UP TOOL}

The extra strong magnet in this tool will hold up to \(3 / 4\) of a pound. This tool is of standard pencil length.

WEIGHT LBS. . 063

\section*{MAGNETIC HOLDING TOOLS}
\begin{tabular}{ccc}
\hline Tool No. & Length & Wt. Lbs. \\
\hline K1 & \(9^{\prime \prime}\) & .091 \\
K2 & \(27^{\prime \prime}\) extended & .416 \\
\hline
\end{tabular}

Extremely useful for extracting metal objects from tight places where a straight tool will not reach. The larger tool, K2, has a telescope type extension and will give extra length when needed.

\section*{NON-REVERSIBLE RATCHETS}

This ratchet is made in 4 different size ratchet openings. Forged of high grade alloy steel with plated finish. These ratchets are designed to perform operations on refrigerant cylinders, shut-off and reducing valves. Also many operations on compressors, motors, etc.
\begin{tabular}{ccccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c}
4 Pt. \\
Ratchet \\
Opening
\end{tabular} & \begin{tabular}{c}
4 Pt. \\
Handle \\
Opening
\end{tabular} & \begin{tabular}{c}
6 Pt. \\
Handle \\
Opening
\end{tabular} & \begin{tabular}{c}
4 Pt. \\
Handle \\
Opening
\end{tabular} & Length & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline RF21 & \(3 / 16\) & \(3 / 16\) & \(1 / 2\) & \(1 / 4\) & 6 & .338 \\
\hline RF22 & \(1 / 4\) & \(3 / 16\) & \(1 / 2\) & \(1 / 4\) & 6 & .338 \\
\hline RF23 & \(5 / 16\) & \(3 / 16\) & \(1 / 2\) & \(5 / 16\) & 6 & .338 \\
\hline RF25 & \(3 / 8\) & \(-3 / 16\) & \(1 / 2\) & \(1 / 4\) & 6 & .322 \\
\hline
\end{tabular}

\section*{RF45 REVERSIBLE RATCHET}

Primarily designed for refrigeration work, this ratchet has easy action, light in weight, streamlined, sturdy construction, featuring ratchet lever that can be easily reversed with a touch of the thumb.
\begin{tabular}{cccccc}
\hline & Ratchet & & & & \\
\hline Part & Opening & \multicolumn{2}{c}{ Handle Openings } & & Weight \\
No. & 4 Pt. & 4 Pt. & 6 Pt. & Lgth. & Lbs. \\
\hline RF45 & \(1 / 4\) & \(3 / 16-1 / 4\) & \(1 / 2\) & 6 & .281 \\
\hline
\end{tabular}

\section*{RF46 FLARING TOOL}

This tool is made of high grade steel, carefully machined and heat treated for long, dependable life. Accommodates all common sizes of tubing. This tool is \(3 / 8^{\prime \prime}\) wide, \(6-1 / 2^{\prime \prime}\) long, has a capacity of \(3 / 16^{\prime \prime}\) to \(5 / 8^{\prime \prime}\) tubing. SHIPPING WEIGHT LBS. 2.038.

\section*{RF47 PINCH-OFF TOOL (patent pending)}

This tool is used primarily to pinch off tubing as well as restoring the tubing to correct shape after the service work is complete. This tool features a quick operating, freeing, and locking action. The RF47 is \(2-1 / 4^{\prime \prime}\) wide, \(4^{\prime \prime}\) long, will accommodate tubing from \(1 / 4^{\prime \prime}\) through \(1 / 2^{\prime \prime}\) in diameter. SHIPPING WEIGHT LBS. . 703.

\section*{RF59 TUBE CUTTER}

A convenient cutter for tubing from \(1 / 8^{\prime \prime}\) to \(1^{\prime \prime}\) O.D. Makes cutting easy with little or no burr. The RF59 is \(2^{\prime \prime}\) wide, \(5^{\prime \prime}\) long. SHIPPING WEIGHT LBS. .588. Reamer flips into position when needed.

\section*{1964 OPEN END WRENCH FOR SUPERIOR PACKLESS VALVE}

This single head wrench is designed especially to fit the hexagon on the auxiliary body of the superior diaphragm packless valve. See Section 2 for complete specifications on wrench \#1964.
Opening, 2 inches; Length, 12-1/4 inches; WEIGHT LBS. .950.

\section*{BONNEY TUBE BENDERS}

These are ideal for bending copper and other tubing to any desired shape without danger of collapsing the tubing. Made of special oil hardened spring steel, cadmium plated. The bell shaped end assures convenient insertion and removal of the tubing. These tube benders come in 6 sizes.
\begin{tabular}{ccccc}
\hline Part No. & \begin{tabular}{c} 
Width \\
(Bell End)
\end{tabular} & Tube Size & Length & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline RF60 & \(3 / 4\) & \(1 / 4\) & 10 & .156 \\
\hline RF61 & \(7 / 8\) & \(5 / 16\) & 10 & .187 \\
\hline RF62 & 1 & \(3 / 8\) & 10 & .247 \\
\hline RF63 & \(1-1 / 8\) & \(7 / 16\) & 12 & .384 \\
\hline RF64 & \(1-1 / 4\) & \(1 / 2\) & 12 & .438 \\
\hline RF65 & \(1-1 / 4\) & \(5 / 8\) & 12 & .531 \\
\hline
\end{tabular}

\section*{RF66 TUBE BENDER SET}

Consists of one each of the above. See Section 16, Page 20 for description.
For information on all refrigeration tool sets see Section 16, Page 20.

\section*{SPORLAN EXPANSION VALVE WRENCHES}

These thin wrenches have a \(30^{\circ}\) head that enables easy removal of the power elements from the body of Sporlan expansion valves.
\begin{tabular}{cccc}
\hline Bonney No. & Opening & Element No. & Fits Valve (Type) \\
\hline \multirow{2}{*}{1252} & \multirow{2}{*}{\(1-5 / 8\)} & 2 & D, L, O, Etc. \\
\cline { 2 - 4 } & & \(* 6\) & M, V, †W (Small) \\
\hline 1236 & \(1-1 / 8\) & 7 & \(\dagger+\) W (Large) \\
\hline 1240 & \(1-1 / 4\) & 5 & G, K \\
\hline 1244 & \(1-3 / 8\) & 8 & C, R, S, T \\
\hline 1248 & \(1-1 / 2\) & 4 & E, B, U, J \\
\hline
\end{tabular}

\section*{RIGHT ANGLE WRENCHES}
heads at \(90^{\circ}\) ANGLES FOR SERVICE WORK
BONNEY \begin{tabular}{lllll}
\hline Part No. & Openings & Length & Wt. Lbs. \\
\hline 2723 & \(3 / 8-7 / 16\) & \(4-1 / 2\) & .119 \\
\hline 2725 B & \(1 / 2-9 / 16\) & \(5-1 / 2\) & .181 \\
\hline 2729 & \(5 / 8-3 / 4\) & \(7-1 / 2\) & .409 \\
\hline
\end{tabular}

\section*{FLARE NUT WRENCH}

Designed especially for making flare nut adjustments, these wrenches are drop forged, chromium plated, with polished heads. Designed long and thin with paneled handles for comfortable grip. Heads are 12 point.
\begin{tabular}{lcccccccc}
\hline \multirow{3}{*}{\(\begin{array}{l}\text { Part } \\
\text { No. }\end{array}\)} & \(\begin{array}{c}\text { Opening } \\
\text { Small } \\
\text { Head }\end{array}\) & \(\begin{array}{c}\text { Opening } \\
\text { Large } \\
\text { Head }\end{array}\) & \(\begin{array}{c}\text { Across } \\
\text { Small } \\
\text { Head }\end{array}\) & \(\begin{array}{c}\text { Across } \\
\text { Large } \\
\text { Head }\end{array}\) & \(\begin{array}{c}\text { Width of } \\
\text { Slot, } \\
\text { Small } \\
\text { Head }\end{array}\) & \(\begin{array}{c}\text { Width of } \\
\text { Slot, } \\
\text { Large }\end{array}\) & & Length
\end{tabular} \(\left.\begin{array}{c}\text { Weight } \\
\text { Lbs. }\end{array}\right]\)

\section*{P319 SEPARATOR}

Length \(11-1 / 4\) inches. Jaw opening \(1-1 / 8\) inches. Wt. 1.625 lbs. Make quick work of removing pulleys in tight places with this Bonney fork wedged separator. The tool is inserted between the pulley hub and the compressor or motor housing after the set screw has been removed. A few light taps on the end of the separator brings the pulley off the shaft.


Made of select steel, nickle chrome plated. For use with any ratchet having \(1 / 4^{\prime \prime}\) opening or specifically Bonney Ratchets \#RF22 and RF45. Used for valve stems. Available in both the "T" handle and \(1 / 4^{\prime \prime}\) male drive.
\begin{tabular}{ccrrr} 
& Size & \multicolumn{2}{c}{ Outside Diameter } & \\
\cline { 3 - 4 } No. & \begin{tabular}{c} 
Square \\
Opening
\end{tabular} & Nose & Shank & Length \\
\hline RF10 & \(3 / 16\) & \(27 / 64\) & \(1 / 2\) & \(1-7 / 8\) \\
RF11 & \(7 / 32\) & \(27 / 64\) & \(1 / 2\) & \(1-7 / 8\) \\
RF12 & \(1 / 4\) & \(1 / 2\) & \(1 / 2\) & \(1-7 / 8\) \\
RF13 & \(5 / 16\) & \(9 / 16\) & \(9 / 16\) & \(1-7 / 8\) \\
RF14 & \(3 / 8\) & \(5 / 8\) & \(5 / 8\) & \(1-7 / 8\)
\end{tabular}


RF10-11
12-13-14
\begin{tabular}{ccrrr} 
& Size \\
& Square & \multicolumn{2}{c}{ Outside Diameter } & \\
\cline { 3 - 4 } No. & Opening & Nose & Shank & Length \\
\hline RF2 & \(3 / 16\) & \(27 / 64\) & \(1 / 2\) & \(1-3 / 8\) \\
RF5 & \(7 / 32\) & \(1 / 2\) & \(1 / 2\) & \(1-3 / 8\) \\
RF3 & \(1 / 4\) & \(1 / 2\) & \(1 / 2\) & \(1-3 / 8\) \\
RF4 & \(5 / 16\) & \(9 / 16\) & \(9 / 16\) & \(1-3 / 8\) \\
RF7 & \(3 / 8\) & \(31 / 32\) & \(31 / 32\) & \(1-3 / 8\)
\end{tabular}


RF2-3-4-5-7

These adaptors are used to convert drive sizes when the correct size is not readily available.
\begin{tabular}{ccc} 
No. & Plug End & Drive End \\
\hline RF49 & \(1 / 4\) & \(1 / 4\) \\
RF41 & \(1 / 4\) & \(3 / 8\) \\
4216 & \(1 / 4\) & \(3 / 8\) \\
4217 & \(3 / 8\) & \(1 / 4\)
\end{tabular}

Bonney's line of Impact-power sockets includes drive sizes from 3/8 inch to \(3 / 4\) inch with deep length in both \(1 / 2\) inch and \(3 / 4\) inch square drives. At the bottom of page 3 you will find " 0 " rings and pins for the \(3 / 4\) drive. The sockets and attachments shown on these pages are not guaranteed due to the unusual requirements.


TYPE b
\begin{tabular}{llcccccc}
\hline Nominal & & & Socket & Drive & Nose & & \\
Open- & Part & & End O.D. & End O.D. & Length & Length & Weight \\
ing & No. & Type & A & B & e & L & Lbs. \\
\hline
\end{tabular}

\section*{3/8 IN. SQUARE DRIVE REGULAR LENGTH SIX POINT}
\begin{tabular}{rrrrrrrr}
\hline \(3 / 8\) & P-2212 & a & .552 & \(11 / 16\) & \(5 / 16\) & \(7 / 8\) & .062 \\
\hline \(7 / 16\) & P-2214 & a & .633 & \(11 / 16\) & \(5 / 16\) & \(7 / 8\) & .060 \\
\hline \(1 / 2\) & P-2216 & b & \(3 / 4\) & \(3 / 4\) & \(\ldots\). & \(7 / 8\) & .070 \\
\hline \(9 / 16\) & P-2218 & b & .791 & .791 & \(\ldots\). & \(7 / 8\) & .083 \\
\hline \(5 / 8\) & P-2220 & b & \(7 / 8\) & \(7 / 8\) & \(\ldots \ldots\) & \(7 / 8\) & .118 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-660, Type 1, Class 1, Style A.
1/2 IN. SQUARE DRIVE REGULAR LENGTH SIX POINT
\begin{tabular}{rrrrrrrr}
\hline \(3 / 8\) & P-3212 & a & .605 & \(7 / 8\) & \(11 / 16\) & \(1-1 / 2\) & .160 \\
\hline \(7 / 16\) & P-3214 & a & .690 & \(7 / 8\) & \(11 / 16\) & \(1-1 / 2\) & .154 \\
\hline \(1 / 2\) & P-3216 & a & .773 & \(15 / 16\) & \(11 / 16\) & \(1-1 / 2\) & .23 \\
\hline \(9 / 16\) & P-3218 & a & .854 & \(15 / 16\) & \(11 / 16\) & \(1-1 / 2\) & .25 \\
\hline \(5 / 8\) & P-3220 & a & .941 & 1 & \(11 / 16\) & \(1-1 / 2\) & .23 \\
\hline \(11 / 16\) & P-3222 & a & 1.022 & 1.022 & \(\ldots\). & \(1-1 / 2\) & .253 \\
\hline \(3 / 4\) & P-3224 & b & \(1-1 / 8\) & \(1-1 / 8\) & \(\ldots\). & \(1-1 / 2\) & .279 \\
\hline \(13 / 16\) & P-3226 & b & \(1-3 / 16\) & \(1-3 / 16\) & \(\ldots \ldots\) & \(1-1 / 2\) & .305 \\
\hline \(7 / 8\) & P-3228 & b & 1.273 & 1.273 & \(\ldots\). & \(1-1 / 2\) & .388 \\
\hline \(15 / 16\) & P-3230 & b & \(1-3 / 8\) & \(1-3 / 8\) & \(\ldots\) & \(1-3 / 4\) & .482 \\
\hline 1 & P-3232 & b & \(1-7 / 16\) & \(1-7 / 16\) & \(\ldots \ldots\) & \(1-3 / 4\) & .518 \\
\hline \(1-1 / 16\) & P-3234 & b & 1.522 & 1.522 & \(\ldots .\). & 2 & .689 \\
\hline \(1-1 / 8\) & P-3236 & b & 1.605 & 1.605 & \(\ldots \ldots\) & 2 & .677 \\
\hline \(1-3 / 16\) & P-3238 & b & \(1-11 / 16\) & \(1-11 / 16\) & \(\ldots\). & 2 & .795 \\
\hline \(1-1 / 4\) & P-3240 & b & 1.774 & 1.774 & \(\ldots .\). & 2 & .908 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-660, Type 1, Class 1, Style A.
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Nominal Opening & Part No. & Type & Socket
End O.D.
A & Drive
End 0.D.
B & Nose Length e & \[
\underset{\mathrm{L}}{\text { Length }}
\] & Weight Lbs. \\
\hline \multicolumn{2}{|r|}{1/2 IN.} & \multicolumn{6}{|l|}{SQUARE DRIVE DEEP LENGTH SIX POINT} \\
\hline 3/8 & P-3212L & a & . 605 & 7/8 & 11/16 & 3-1/4 & . 358 \\
\hline 7/16 & P-3214L & a & . 690 & 7/8 & 11/16 & 3-1/4 & . 381 \\
\hline 1/2 & P-3216L & a & . 773 & 15/16 & 11/16 & 3-1/4 & . 432 \\
\hline 9/16 & P-3218L & a & . 854 & 15/16 & 11/16 & 3-1/4 & . 427 \\
\hline 5/8 & P-3220L & a & . 941 & 1 & 11/16 & 3-1/4 & . 468 \\
\hline 11/16 & P-3222L & b & 1.022 & 1.022 & & 3-1/4 & . 524 \\
\hline 3/4 & P-3224L & b & 1-1/8 & 1-1/8 & & 3-1/4 & . 577 \\
\hline 13/16 & P-3226L & b & 1-3/16 & 1-3/16 & & 3-1/4 & . 617 \\
\hline 7/8 & P-3228L & b & 1.273 & 1.273 & & 3-1/2 & . 836 \\
\hline 15/16 & P-3230L & b & 1-3/8 & 1-3/8 & & 3-1/2 & . 919 \\
\hline 1 & P-3232L & b & 1-7/16 & 1-7/16 & & 3-1/2 & . 965 \\
\hline
\end{tabular}

3/4 IN. SQUARE DRIVE REGULAR LENGTH SIX POINT
\begin{tabular}{rrrrrrrr}
\hline \(3 / 4\) & I-5224 & a & \(1-1 / 4\) & \(1-5 / 8\) & \(5 / 8\) & \(2-1 / 4\) & .903 \\
\hline \(13 / 16\) & I-5226 & a & \(1-3 / 8\) & \(1-5 / 8\) & \(5 / 8\) & \(2-1 / 4\) & .923 \\
\hline \(7 / 8\) & I-5228 & a & \(1-1 / 2\) & \(1-5 / 8\) & \(5 / 8\) & \(2-1 / 4\) & .993 \\
\hline \(15 / 16\) & I-5230 & a & \(1-9 / 16\) & \(1-5 / 8\) & \(5 / 8\) & \(2-3 / 8\) & .85 \\
\hline 1 & I-5232 & b & \(1-5 / 8\) & \(1-5 / 8\) & \(\ldots\). & \(2-3 / 8\) & .89 \\
\hline \(1-1 / 16\) & I-5234 & b & \(1-11 / 16\) & \(1-11 / 16\) & \(\ldots\). & \(2-1 / 2\) & 1.05 \\
\hline \(1-1 / 8\) & I-5236 & b & \(1-3 / 4\) & \(1-3 / 4\) & \(\ldots \ldots\) & \(2-1 / 2\) & 1.02 \\
\hline \(1-3 / 16\) & I-5238 & b & \(1-7 / 8\) & \(1-7 / 8\) & \(\ldots \ldots\) & \(2-1 / 2\) & 1.48 \\
\hline \(1-1 / 4\) & I-5240 & b & 2 & 2 & \(\ldots \ldots\) & \(2-5 / 8\) & 1.47 \\
\hline \(1-5 / 16\) & I-5242 & b & \(2-1 / 16\) & \(2-1 / 16\) & \(\ldots \ldots\) & \(2-5 / 8\) & 1.77 \\
\hline \(1-3 / 8\) & I-5244 & b & \(2-1 / 8\) & \(2-1 / 8\) & \(\ldots \ldots\) & \(2-3 / 4\) & 1.66 \\
\hline \(1-7 / 16\) & I-5246 & b & \(2-1 / 4\) & \(2-1 / 4\) & \(\ldots \ldots\) & \(2-3 / 4\) & 2.17 \\
\hline \(1-1 / 2\) & I-5248 & b & \(2-5 / 16\) & \(2-5 / 16\) & \(\ldots \ldots\) & \(2-3 / 4\) & 2.22 \\
\hline
\end{tabular}

\section*{3/4 IN. SQUARE DRIVE DEEP LENGTH SIX POINT}
\begin{tabular}{rrrrrrrr}
\hline \(3 / 4\) & I-5224L & a & \(1-1 / 4\) & \(1-5 / 8\) & \(5 / 8\) & \(3-1 / 2\) & 1.51 \\
\hline \(13 / 16\) & I-5226L & a & \(1-3 / 8\) & \(1-5 / 8\) & \(5 / 8\) & \(3-1 / 2\) & 1.51 \\
\hline \(7 / 8\) & I-5228L & a & \(1-1 / 2\) & \(1-5 / 8\) & \(5 / 8\) & \(3-1 / 2\) & 1.46 \\
\hline \(15 / 16\) & I-5230L & a & \(1-9 / 16\) & \(1-5 / 8\) & \(5 / 8\) & \(3-1 / 2\) & 1.41 \\
\hline 1 & I-5232L & b & \(1-5 / 8\) & \(1-5 / 8\) & \(\ldots .\). & \(3-1 / 2\) & 1.35 \\
\hline \(1-1 / 16\) & I-5234L & b & \(1-11 / 16\) & \(1-11 / 16\) & \(\ldots .\). & \(3-1 / 2\) & 1.42 \\
\hline \(1-1 / 8\) & I-5236L & b & \(1-3 / 4\) & \(1-3 / 4\) & \(\ldots .\). & \(3-1 / 2\) & 1.36 \\
\hline \(1-1 / 4\) & I-5240L & b & 2 & 2 & \(\ldots .\). & \(3-3 / 4\) & 2.07 \\
\hline \(1-1 / 2\) & I-5248L & b & \(2-5 / 16\) & \(2-5 / 16\) & \(\ldots .\). & \(3-3 / 4\) & 2.87 \\
\hline
\end{tabular}

3/4 IN. SQUARE DRIVE REGULAR LENGTH FOUR POINT
(For Use on Budd Wheels)
\begin{tabular}{lllllllll}
\(13 / 16\) & \(\mathrm{I}-5426\) & b & \(1-5 / 8\) & \(1-5 / 8\) & \(\ldots\) & \(2-1 / 4\) & 1.01 \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Part No. & Female A & \[
\underset{\mathrm{B}}{\mathrm{Male}}
\] & Length & \[
\underset{\mathrm{C}}{\mathrm{O} . \mathrm{D}}
\] & Weight Lbs. & Lock Type \\
\hline AP-23 & 3/8 & 1/2 & 1-1/2 & 1 & . 20 & Pin \\
\hline \multicolumn{7}{|l|}{Ref.: Fed. Spec. GGG-W-660, Type 3.} \\
\hline AP-32 & 1/2 & 3/8 & 1-1/2 & 1 & . 26 & Pin \\
\hline AP-43 & 5/8 & 1/2 & 1-53/64 & 1-1/8 & . 30 & Pin \\
\hline \multicolumn{7}{|l|}{Ref.: Fed. Spec. GGG-W-660, Type 3.} \\
\hline AP-53 & 3/4 & 1/2 & 2-5/32 & 1-5/8 & . 64 & Pin \\
\hline \multicolumn{7}{|l|}{Ref.: Fed. Spec. GGG-W-660, Type 3.} \\
\hline
\end{tabular}

\begin{tabular}{ccccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Square \\
Drive
\end{tabular} & Length & \begin{tabular}{c} 
Ext. \\
B
\end{tabular} & \begin{tabular}{c} 
O.D. \\
C
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} & \begin{tabular}{c} 
Lock \\
Type
\end{tabular} \\
\hline EP-2-3 & \(3 / 8\) & 3 & \(3 / 8\) & \(11 / 16\) & .13 & Pin \\
\hline EP-2-6 & \(3 / 8\) & 6 & \(3 / 8\) & \(11 / 16\) & .25 & Pin \\
\hline Ref.: Fed. Spec. GGG-W-660, Type 2. & & & & \\
\hline EP-3-5 & \(1 / 2\) & 5 & \(1 / 2\) & \(1-1 / 16\) & .40 & Pin \\
\hline EP-3-10 & \(1 / 2\) & 10 & \(1 / 2\) & \(1-1 / 16\) & .91 & Pin \\
\hline Ref.: Fed. Spec. GGG-W-660, Type 2. & & & & \\
\hline EP-5-4 & \(3 / 4\) & \(3-1 / 2\) & \(3 / 4\) & \(1-3 / 4\) & 1.20 & Pin \\
\hline EP-5-10 & \(3 / 4\) & 10 & \(3 / 4\) & \(1-3 / 4\) & 3.43 & Pin \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-660, Type 2.
"O" RINGS

\section*{PINS}
\begin{tabular}{cccc}
\hline \begin{tabular}{c} 
Ring \\
Part No.
\end{tabular} & \begin{tabular}{c} 
Used on Socket \\
Part No.
\end{tabular} & \begin{tabular}{c} 
Pin \\
Part No.
\end{tabular} & \begin{tabular}{c} 
Used on Socket \\
Part No.
\end{tabular} \\
\hline RIB-28 & I-5224 thru I-5242 & SP-22 & I-5224 thru I-5242 \\
\hline RIB-32 & I-5244 thru I-5254 & SP-27 & I-5244 thru I-5254 \\
\hline (Both regular and deep) & \multicolumn{2}{c}{ (Both regular and deep) } \\
\hline
\end{tabular}


STRIKING FACE BOX WRENCHES - ALLOY STEEL
\begin{tabular}{lccccccc}
\hline \begin{tabular}{l} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
OPENING \\
A
\end{tabular} & B & C & D & L & T & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline 8807 & \(1-1 / 16\) & \(1-11 / 16\) & \(1-5 / 32\) & \(1-5 / 16\) & \(10-1 / 2\) & \(13 / 16\) & 2.125 \\
\hline 8807 A & \(1-1 / 8\) & \(1-11 / 16\) & \(1-5 / 32\) & \(1-5 / 16\) & \(10-1 / 2\) & \(13 / 16\) & 2.140 \\
\hline 8808 & \(1-1 / 4\) & 2 & \(1-5 / 32\) & \(1-3 / 8\) & 11 & \(7 / 8\) & 2.453 \\
\hline 8808 A & \(1-5 / 16\) & 2 & \(1-5 / 32\) & \(1-9 / 16\) & 11 & \(7 / 8\) & 2.563 \\
\hline 8809 & \(1-7 / 16\) & \(2-1 / 4\) & \(1-5 / 16\) & \(1-1 / 2\) & \(11-1 / 2\) & 1 & 3.400 \\
\hline 8809 A & \(1-1 / 2\) & \(2-1 / 4\) & \(1-5 / 16\) & \(1-1 / 2\) & \(11-1 / 2\) & 1 & 3.413 \\
\hline 8810 & \(1-5 / 8\) & \(2-1 / 2\) & \(1-1 / 2\) & \(1-9 / 16\) & 12 & \(1-1 / 16\) & 4.488 \\
\hline 8810 A & \(1-11 / 16\) & \(2-1 / 2\) & \(1-1 / 2\) & \(1-9 / 16\) & 12 & \(1-1 / 16\) & 4.288 \\
\hline 8811 & \(1-1 / 16\) & \(2-13 / 16\) & \(1-9 / 16\) & \(1-3 / 4\) & \(12-1 / 2\) & \(1-1 / 8\) & 5.575 \\
\hline 8811 A & \(1-7 / 8\) & \(2-13 / 16\) & \(1-9 / 16\) & \(1-3 / 4\) & \(12-1 / 2\) & \(1-1 / 8\) & 5.550 \\
\hline 8812 & 2 & \(3-15 / 32\) & \(1-9 / 16\) & \(1-13 / 16\) & \(13-1 / 2\) & \(1-3 / 8\) & 6.112 \\
\hline 8813 & \(2-3 / 16\) & \(3-15 / 32\) & \(1-3 / 4\) & 2 & \(13-1 / 2\) & \(1-3 / 8\) & 8.613 \\
\hline 8813 A & \(2-1 / 4\) & \(3-15 / 32\) & \(1-13 / 16\) & \(1-15 / 16\) & \(13-1 / 2\) & \(1-3 / 8\) & 8.613 \\
\hline 8814 & \(2-3 / 8\) & \(3-29 / 32\) & \(1-3 / 4\) & \(2-1 / 2\) & \(14-1 / 2\) & \(1-9 / 16\) & 9.594 \\
\hline 8815 & \(2-9 / 16\) & \(3-29 / 32\) & \(1-15 / 16\) & \(2-1 / 4\) & \(14-1 / 2\) & \(1-9 / 16\) & 10.575 \\
\hline 8815 A & \(2-5 / 8\) & \(3-29 / 32\) & \(1-15 / 16\) & \(2-1 / 4\) & \(14-1 / 2\) & \(1-9 / 16\) & 10.487 \\
\hline 8816 & \(2-3 / 4\) & \(4-21 / 32\) & 2 & \(2-1 / 4\) & 16 & \(1-13 / 16\) & 10.813 \\
\hline 8816 B & \(2-15 / 16\) & \(4-21 / 32\) & \(2-1 / 8\) & \(2-5 / 16\) & 16 & \(1-13 / 16\) & 15.094 \\
\hline 8817 A & 3 & \(4-15 / 16\) & \(2-1 / 4\) & \(2-9 / 16\) & \(16-1 / 2\) & 2 & 17.775 \\
\hline 8817 & \(3-1 / 8\) & \(4-15 / 16\) & \(2-1 / 4\) & \(2-9 / 16\) & \(16-1 / 2\) & 2 & 17.344 \\
\hline
\end{tabular}



STRUCTURAL WRENCHES - CARBON STEEL
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
Part \\
No.
\end{tabular} & \[
\begin{aligned}
& \text { OPENING } \\
& \text { A }
\end{aligned}
\] & FED. SPEC. & \[
\begin{gathered}
\text { GGG-W-636 }
\end{gathered}
\] & \[
\underset{\mathrm{L}}{\mathrm{TYPE} I X}
\] & \[
\underset{\mathrm{T}}{\mathrm{CLASS} \text { I }}
\] & Wt. Lbs. \\
\hline 201A & 7/16 & 1-3/16 & 9/16 & 9-1/2 & 3/8 & 27 \\
\hline 201 & 1/2 & 1-3/16 & 5/8 & 9-1/2 & 3/8 & 27 \\
\hline 201B & 9/16 & 1-3/16 & 11/16 & 9-1/2 & 3/8 & 27 \\
\hline 203 A & 5/8 & 1-9/16 & 25/32 & 12 & 7/16 & 53 \\
\hline 203 & 11/16 & 1-9/16 & 27/32 & 12 & 7/16 & 53 \\
\hline 204A & 3/4 & 1-9/16 & 29/32 & 12 & 7/16 & 53 \\
\hline 205A & 13/16 & 2-3/32 & 31/32 & 14-1/2 & 17/32 & 1.0 \\
\hline 205 & 7/8 & 2-3/32 & 31/32 & 14-1/2 & 17/32 & 1.0 \\
\hline 206 & 31/32 & 2-3/32 & 1-1/16 & 14-1/2 & 17/32 & 1.0 \\
\hline 206B & 1 & 2-3/32 & 1-1/16 & 14-1/2 & 17/32 & 1.0 \\
\hline 207 & 1-1/16 & 2-1/2 & 1-1/4 & 17-1/4 & 19/32 & 1.7 \\
\hline 207A & 1-1/8 & 2-1/2 & 1-1/4 & 17-1/4 & 19/32 & 1.7 \\
\hline 208 & 1-1/4 & 2-29/32 & 1-3/8 & 19 & 21/32 & 2.6 \\
\hline 208A & 1-5/16 & 2-29/32 & 1-3/8 & 19 & 21/32 & 2.6 \\
\hline 209 & 1-7/16 & 3-5/16 & 1-9/16 & 21 & 23/32 & 3.7 \\
\hline 209A & 1-1/2 & 3-5/16 & 1-9/16 & 21 & 23/32 & 3.7 \\
\hline 210 & 1-5/8 & 3-11/16 & 1-13/16 & 23 & \(7 / 8\) & 5.3 \\
\hline 210A & 1-11/16 & 3-11/16 & 1-13/16 & 23 & 7/8 & 5.3 \\
\hline 211 & 1-13/16 & 4 & 2-5/16 & 25 & 15/16 & 7.3 \\
\hline 211A & 1-7/8 & 4 & 2-7/16 & 25 & 15/16 & 7.3 \\
\hline 212 & 2 & 4 & 2-9/16 & 25 & 15/16 & 7.3 \\
\hline
\end{tabular}

\begin{tabular}{lccccccr}
\hline \begin{tabular}{l} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
OPENING \\
A
\end{tabular} & B & C & D & L & T & \begin{tabular}{r} 
Wt. \\
Lbs.
\end{tabular} \\
\hline 901 A & \(7 / 16\) & \(1-3 / 16\) & \(11 / 16\) & \(3 / 4\) & \(9-1 / 2\) & \(11 / 32\) & .32 \\
\hline 901 & \(1 / 2\) & \(1-3 / 16\) & \(11 / 16\) & \(3 / 4\) & \(9-1 / 2\) & \(11 / 32\) & .32 \\
\hline 901 B & \(9 / 16\) & \(1-3 / 16\) & \(11 / 16\) & \(3 / 4\) & \(9-1 / 2\) & \(11 / 32\) & 32 \\
\hline 903 A & \(5 / 8\) & \(1-9 / 16\) & \(7 / 8\) & \(13 / 16\) & 12 & \(7 / 16\) & 63 \\
\hline 903 & \(11 / 16\) & \(1-9 / 16\) & \(7 / 8\) & \(13 / 16\) & 12 & \(7 / 16\) & 63 \\
\hline 904 A & \(3 / 4\) & \(1-9 / 16\) & \(7 / 8\) & \(13 / 16\) & 12 & \(7 / 16\) & 63 \\
\hline 905 A & \(13 / 16\) & 2 & \(1-1 / 8\) & \(15 / 16\) & \(14-1 / 2\) & \(17 / 32\) & 1.2 \\
\hline 905 & \(7 / 8\) & 2 & \(1-1 / 8\) & \(15 / 16\) & \(14-1 / 2\) & \(17 / 32\) & 1.2 \\
\hline 906 & \(31 / 32\) & 2 & \(1-1 / 8\) & \(15 / 16\) & \(14-1 / 2\) & \(17 / 32\) & 1.2 \\
\hline 906 B & 1 & 2 & \(1-1 / 8\) & \(15 / 16\) & \(14-1 / 2\) & \(17 / 32\) & 1.2 \\
\hline 907 & \(1-1 / 16\) & \(2-1 / 4\) & \(1-9 / 32\) & \(1-1 / 16\) & 17 & \(5 / 8\) & 1.9 \\
\hline 907 A & \(1-1 / 8\) & \(2-1 / 4\) & \(1-9 / 32\) & \(1-1 / 16\) & 17 & \(5 / 8\) & 1.9 \\
\hline 908 & \(1-1 / 4\) & 3 & \(1-5 / 8\) & \(1-1 / 4\) & \(19-1 / 2\) & \(3 / 4\) & 2.8 \\
\hline 908 A & \(1-5 / 16\) & 3 & \(1-5 / 8\) & \(1-1 / 4\) & \(19-1 / 2\) & \(3 / 4\) & 2.8 \\
\hline 909 & \(1-7 / 16\) & 3 & \(1-5 / 8\) & \(1-1 / 4\) & \(19-1 / 2\) & \(3 / 4\) & 2.8 \\
\hline 909 A & \(1-1 / 2\) & 3 & \(1-5 / 8\) & \(1-1 / 4\) & \(19-1 / 2\) & \(3 / 4\) & 2.8 \\
\hline 910 & \(1-5 / 8\) & \(3-3 / 8\) & \(1-15 / 16\) & \(1-7 / 16\) & 23 & \(13 / 16\) & 5.6 \\
\hline 910 A & \(1-11 / 16\) & \(3-3 / 8\) & \(1-15 / 16\) & \(1-7 / 16\) & 23 & \(13 / 16\) & 5.6 \\
\hline 911 & \(1-13 / 16\) & \(3-3 / 8\) & \(1-15 / 16\) & \(1-7 / 16\) & 23 & \(13 / 16\) & 5.6 \\
\hline 911 A & \(1-7 / 8\) & \(3-3 / 8\) & 2 & \(1-7 / 16\) & 23 & \(13 / 16\) & 5.6 \\
\hline 912 & 2 & \(3-3 / 8\) & \(2-1 / 8\) & \(1-7 / 16\) & 23 & \(13 / 16\) & 5.6 \\
\hline & & & & & & & \\
\hline
\end{tabular}
\begin{tabular}{llllll} 
\\
\hline
\end{tabular}

\section*{DOUBLE HEAD OPEN END WRENCHES - CARBON STEEL}

FINISHED IN BLACK ENAMEL, BRIGHT HEADS

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
Part \\
No.
\end{tabular} & \[
\begin{aligned}
& \mathrm{Op} \\
& \mathrm{~A}
\end{aligned}
\] & & C & D & E & F & L & T & Wt. Lbs. \\
\hline 721 & 5/16 & 3/8 & 5/8 & 13/16 & 11/32 & 13/32 & 4 & 1/4 & 08 \\
\hline 723 & 3/8 & 7/16 & 27/32 & 1-1/32 & 13/32 & 15/32 & 4-5/8 & 9/32 & 13 \\
\hline 725 & 7/16 & 1/2 & 1 & 1-1/4 & 15/32 & 9/16 & 5-1/2 & 5/16 & 19 \\
\hline 725A & 7/16 & 9/16 & 1 & 1-1/4 & 15/32 & 5/8 & 5-1/2 & 5/16 & 19 \\
\hline 725B & 1/2 & 9/16 & 1 & 1-1/4 & 9/16 & \(5 / 8\) & 5-1/2 & 5/16 & 19 \\
\hline 25 & 1/2 & 19/32 & 1 & 1-1/4 & 9/16 & 21/32 & 5-1/2 & 5/16 & 19 \\
\hline 727 & 9/16 & 5/8 & 1-3/16 & 1-3/8 & 5/8 & 11/16 & 6-1/2 & 11/32 & 28 \\
\hline 27 & 19/32 & 11/16 & 1-3/16 & 1-3/8 & 21/32 & 3/4 & 6-1/2 & 11/32 & 28 \\
\hline 27B & 5/8 & 11/16 & 1-3/16 & 1-3/8 & 11/16 & 3/4 & 6-1/2 & 11/32 & 28 \\
\hline 729 & 5/8 & 3/4 & 1-3/8 & 1-9/16 & 11/16 & 13/16 & 7-1/2 & 3/8 & 39 \\
\hline 29B & 11/16 & 3/4 & 1-3/8 & 1-9/16 & 3/4 & 13/16 & 7-1/2 & 3/8 & 39 \\
\hline 29 C & 11/16 & 13/16 & 1-3/8 & 1-9/16 & 3/4 & 7/8 & 7-1/2 & 3/8 & 39 \\
\hline 731 & 3/4 & 13/16 & 1-3/4 & 1-7/8 & 7/8 & 15/16 & 8-1/2 & \(3 / 8\) & 55 \\
\hline 731A & 3/4 & 7/8 & 1-3/4 & 1-7/8 & 7/8 & 1 & 8-1/2 & \(3 / 8\) & 55 \\
\hline 731 B & 13/16 & 7/8 & 1-3/4 & 1-7/8 & 15/16 & 1 & 8-1/2 & 3/8 & 55 \\
\hline 33A & 7/8 & 15/16 & 1-3/4 & 2 & 15/16 & 1 & 9-1/2 & 7/16 & 4 \\
\hline 733 & 7/8 & 1 & 1-3/4 & 2 & 15/16 & 1-1/16 & 9-1/2 & 7/16 & 84 \\
\hline 33 C & 15/16 & 1 & 1-3/4 & 2 & 1 & 1-1/16 & 9-1/2 & 7/16 & 84 \\
\hline 34 & 7/8 & 1-1/16 & 2 & 2-1/4 & 15/16 & 1-1/8 & 10-3/4 & 1/2 & 2 \\
\hline 34A & 15/16 & 1-1/16 & 2 & 2-1/4 & 1 & 1-1/8 & 10-3/4 & 1/2 & 1.2 \\
\hline 735 & 1 & 1-1/8 & 2 & 2-1/4 & 1-1/16 & 1-3/16 & 10-3/4 & 1/2 & 1.2 \\
\hline 36B & 1-1/16 & 1-1/8 & 2-1/4 & 2-5/16 & 1-1/8 & 1-3/16 & 12 & 9/16 & 1.5 \\
\hline 37 & 1-1/16 & 1-1/4 & 2-1/4 & 2-5/16 & 1-1/8 & 1-5/16 & 12 & 9/16 & 1.5 \\
\hline 737 & 1-1/8 & 1-1/4 & 2-1/4 & 2-5/16 & 1-3/16 & 1-5/16 & 12 & 9/16 & 1.5 \\
\hline 37A & 1-1/8 & 1-5/16 & 2-1/4 & 2-5/16 & 1-3/16 & 1-3/8 & 12 & 9/16 & 1.5 \\
\hline 39 B & 1-1/4 & 1-5/16 & 2-5/8 & 3 & 1-5/16 & 1-3/8 & 13-1/2 & 5/8 & 2.3 \\
\hline 39 & 1-1/4 & 1-7/16 & 2-5/8 & 3 & 1-5/16 & 1-1/2 & 13-1/2 & 5/8 & 2.3 \\
\hline 39C & 1-3/8 & 1-7/16 & 2-5/8 & 3 & 1-7/16 & 1-1/2 & 13-1/2 & 5/8 & 2.3 \\
\hline 41 B & 1-1/2 & 1-5/8 & 3 & 3-1/2 & 1-5/8 & 1-7/8 & 15-3/4 & 3/4 & 3.5 \\
\hline 44 A & 1-11/16 & 1-7/8 & 4 & 4-1/2 & 2-1/4 & 2-1/2 & 19 & 13/16 & 7.5 \\
\hline 47 & 2 & 2-3/16 & 4-1/8 & 4-5/8 & 2-3/8 & 2-3/4 & 21 & '1-1/32 & 9.5 \\
\hline 49 & 2-3/16 & 2-3/8 & 4-3/8 & 5-3/8 & 2-1/2 & 2-3/4 & 22 & 1-1/8 & 12.5 \\
\hline 49A & 2-1/4 & 2-7/16 & 4-3/8 & 5-3/8 & 2-5/8 & 2-7/8 & 22 & 1-1/8 & 12.5 \\
\hline
\end{tabular}

SINGLE HEAD THIN CHECK-NUT WRENCHES - CARBON STEEL
\begin{tabular}{lcccccr}
\hline \begin{tabular}{l} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
OPENING \\
A
\end{tabular} & \multicolumn{7}{c}{B} & C & L & T & \begin{tabular}{r} 
Wt. \\
Lbs.
\end{tabular} \\
\hline 601 A & \(7 / 16\) & \(1-1 / 16\) & \(9 / 16\) & 4 & \(5 / 32\) & .07 \\
\hline 601 & \(1 / 2\) & \(1-1 / 16\) & \(9 / 16\) & 4 & \(5 / 32\) & .07 \\
\hline 602 A & \(9 / 16\) & \(1-1 / 4\) & \(5 / 8\) & \(4-1 / 2\) & \(3 / 16\) & .11 \\
\hline 602 & \(19 / 32\) & \(1-1 / 4\) & \(21 / 32\) & \(4-1 / 2\) & \(3 / 16\) & .11 \\
\hline 603 A & \(5 / 8\) & \(1-1 / 2\) & \(11 / 16\) & \(5-1 / 8\) & \(3 / 16\) & .15 \\
\hline 603 & \(11 / 16\) & \(1-1 / 2\) & \(3 / 4\) & \(5-1 / 8\) & \(3 / 16\) & .15 \\
\hline 604 A & \(3 / 4\) & \(1-11 / 16\) & \(13 / 16\) & \(5-7 / 8\) & \(7 / 32\) & .19 \\
\hline 604 & \(25 / 32\) & \(1-11 / 16\) & \(27 / 32\) & \(5-7 / 8\) & \(7 / 32\) & .19 \\
\hline 605 A & \(13 / 16\) & \(1-7 / 8\) & \(7 / 8\) & \(6-5 / 8\) & \(1 / 4\) & .30 \\
\hline 605 & \(7 / 8\) & \(1-7 / 8\) & \(29 / 32\) & \(6-5 / 8\) & \(1 / 4\) & .30 \\
\hline 606 & \(31 / 32\) & 2 & \(1-1 / 32\) & \(7-1 / 2\) & \(9 / 32\) & .38 \\
\hline 606 B & 1 & 2 & \(1-1 / 16\) & \(7-1 / 2\) & \(9 / 32\) & .38 \\
\hline 607 & \(1-1 / 16\) & \(2-5 / 16\) & \(1-1 / 8\) & \(8-1 / 2\) & \(5 / 16\) & .60 \\
\hline 607 A & \(1-1 / 8\) & \(2-5 / 16\) & \(1-3 / 16\) & \(8-1 / 2\) & \(5 / 16\) & .60 \\
\hline 608 & \(1-1 / 4\) & \(2-11 / 16\) & \(1-5 / 16\) & 10 & \(3 / 8\) & 1.1 \\
\hline 608 A & \(1-5 / 16\) & \(2-11 / 16\) & \(1-3 / 8\) & 10 & \(3 / 8\) & 1.1 \\
\hline 609 & \(1-7 / 16\) & \(3-1 / 4\) & \(1-1 / 2\) & \(11-5 / 8\) & \(7 / 16\) & 1.7 \\
\hline 609 A & \(1-1 / 2\) & \(3-1 / 4\) & \(1-5 / 8\) & \(11-5 / 8\) & \(7 / 16\) & 1.7 \\
\hline 610 & \(1-5 / 8\) & \(3-9 / 16\) & \(1-7 / 8\) & \(13-1 / 4\) & \(1 / 2\) & 2.4 \\
\hline 610 A & \(1-11 / 16\) & \(3-9 / 16\) & 2 & \(13-1 / 4\) & \(1 / 2\) & 2.4 \\
\hline
\end{tabular}

DOUBLE HEAD SET SCREW WRENCHES - CARBON STEEL
\begin{tabular}{cccccccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \multicolumn{2}{c}{ OPENINGS } & B & C & D & E & F & L & T \\
\hline 525 & \(5 / 16\) & \(1 / 4\) & \(1-1 / 16\) & \(27 / 32\) & \(5 / 16\) & \(1 / 4\) & \(4-1 / 4\) & \(9 / 32\) & Oz. \\
\hline 527 & \(3 / 8\) & \(5 / 16\) & \(1-5 / 16\) & 1 & \(3 / 8\) & \(5 / 16\) & 5 & \(11 / 32\) & .20 \\
\hline 529 & \(7 / 16\) & \(3 / 8\) & \(1-3 / 8\) & \(1-3 / 8\) & \(7 / 16\) & \(3 / 8\) & \(5-3 / 4\) & \(3 / 8\) & .35 \\
\hline 531 & \(1 / 2\) & \(7 / 16\) & \(1-5 / 8\) & \(1-3 / 8\) & \(1 / 2\) & \(7 / 16\) & \(6-5 / 8\) & \(7 / 16\) & .53 \\
\hline 533 & \(9 / 16\) & \(1 / 2\) & \(1-3 / 4\) & \(1-5 / 8\) & \(9 / 16\) & \(1 / 2\) & \(7-1 / 2\) & \(1 / 2\) & .70 \\
\hline 541 & 1 & \(7 / 8\) & \(2-3 / 8\) & \(2-5 / 8\) & 1 & \(7 / 8\) & \(12-1 / 2\) & \(3 / 4\) & 2.4 \\
\hline 543 & \(1-1 / 8\) & 1 & \(2-5 / 8\) & \(2-7 / 8\) & 1 & \(1-1 / 8\) & 14 & \(13 / 16\) & 3.6 \\
\hline Fed. Spec.: GGG-W-636a, Type 7. & & & & & \\
\hline
\end{tabular}

DOUBLE HEAD THIN CHECK-NUT WRENCHES - CARBON STEEL
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline Part
No. & \[
\begin{gathered}
\mathrm{OPE} \\
\mathrm{~A}
\end{gathered}
\] & GS & C & D & E & F & L & T & Wt. Lbs. \\
\hline 623D & 7/16 & 1/2 & 1 & 1-3/16 & 7/16 & 9/16 & 4-1/2 & 5/32 & 12 \\
\hline 624B & 1/2 & 9/16 & 1 & 1-3/16 & 9/16 & 9/16 & 4-1/2 & 5/32 & . 12 \\
\hline 626 S & 9/16 & 5/8 & 1-1/4 & 1-7/16 & 9/16 & 5/8 & 5-1/2 & 3/16 & . 20 \\
\hline 627 & 19/32 & 11/16 & 1-1/4 & 1-7/16 & 19/32 & 11/16 & 5-1/2 & 3/16 & . 20 \\
\hline 630 B & 3/4 & 13/16 & 1-5/8 & 1-13/16 & 3/4 & 13/16 & 7 & 7/32 & . 32 \\
\hline 630 E & 3/4 & 7/8 & 1-5/8 & 1-13/16 & 3/4 & 7/8 & 7 & 7/32 & . 32 \\
\hline 632 C & 7/8 & 15/16 & 1-15/16 & 2-1/4 & \(7 / 8\) & 15/16 & 8-1/2 & 1/4 & . 60 \\
\hline 634 A & 7/8 & 1 & 1-15/16 & 2-1/4 & 7/8 & 1 & 8-1/2 & 1/4 & . 60 \\
\hline 635 D & & 1-1/8 & 2-5/16 & 2-5/8 & 1-1/8 & 1-1/4 & 10-1/2 & 9/32 & 1.0 \\
\hline 637 & 1-1/16 & 1-1/4 & 2-5/16 & 2-5/8 & 1-3/16 & 1-3/8 & 10-1/2 & 9/32 & 1.0 \\
\hline 637 A & 1-1/8 & 1-5/16 & 2-5/16 & 2-5/8 & 1-1/4 & 1-3/8 & 10-1/2 & 9/32 & 1.0 \\
\hline 639 & 1-1/4 & 1-7/16 & 2-3/4 & 3-3/16 & 1-5/16 & 1-1/2 & 12-1/2 & 3/8 & 1.9 \\
\hline 640 A & 1-5/16 & 1-1/2 & 2-3/4 & 3-3/16 & 1-3/8 & 1-9/16 & 12-1/2 & 3/8 & 1.9 \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & \multicolumn{7}{|r|}{SIX-POINT OPENINGS} \\
\hline & \begin{tabular}{l}
Part \\
No.
\end{tabular} & \[
\begin{array}{r}
\hline T^{\prime \prime} \text { HAND } \\
\text { Ope }
\end{array}
\] & \[
\begin{aligned}
& \hline \text { SOCKET } \\
& \text { gs }
\end{aligned}
\] & \[
\underset{\mathrm{C}}{\mathrm{ENCHES}}
\] & \[
\begin{gathered}
\mathrm{ARBON} \\
\mathrm{D}
\end{gathered}
\] & L & Wt. Lbs. \\
\hline \multirow{21}{*}{FINISHED IN BLACK ENAMEL,} & 961 A & 5/16 & 1/2 & 4-1/2 & 1/4 & 4-1/4 & 12 \\
\hline & 962D & 3/8 & 5/8 & 4-1/2 & \(5 / 16\) & 4-1/2 & 22 \\
\hline & 963 D & 7/16 & 11/16 & 4-1/2 & 3/8 & 4-7/8 & 26 \\
\hline & 964 A & 1/2 & 3/4 & 5-1/2 & 7/16 & 5-1/4 & 34 \\
\hline & 965D & 9/16 & 7/8 & 5-1/2 & 1/2 & 5-3/4 & 53 \\
\hline & 966D & 5/8 & 1 & 6-1/8 & 1/2 & 6-1/8 & 70 \\
\hline & 967A & 11/16 & 1-1/8 & 6-1/8 & 5/8 & 6-1/2 & 94 \\
\hline & 967D & 3/4 & 1-1/8 & 6-1/8 & 5/8 & 6-1/2 & 94 \\
\hline & 968D & 13/16 & 1-1/4 & 7 & 5/8 & 7 & 1.1 \\
\hline & 969A & 7/8 & 1-3/8 & 7 & 5/8 & 7-3/8 & 1.3 \\
\hline & 970S & 15/16 & 1-1/2 & 7-7/8 & 3/4 & 7-7/8 & 1.7 \\
\hline & 970D & 1 & 1-1/2 & 7-7/8 & 3/4 & 7-7/8 & 1.7 \\
\hline & 971A & 1-1/16 & 1-5/8 & 8-1/4 & 3/4 & 8-1/4 & 2.1 \\
\hline & 971D & 1-1/8 & 1-5/8 & 8-1/4 & 3/4 & 8-1/4 & 2.1 \\
\hline & 973A & 1-1/4 & 1-7/8 & 9 & 7/8 & 9-1/8 & 2.6 \\
\hline & 973B & 1-5/16 & 1-7/8 & 9 & 7/8 & \(9-1 / 8\) & 2.6 \\
\hline & 975A & 1-7/16 & 2-1/8 & 10 & 1 & 10 & 3.8 \\
\hline & 975D & 1-1/2 & 2-1/8 & 10 & 1 & 10 & 3.8 \\
\hline & 976A & 1-5/8 & 2-3/8 & 10-3/8 & 1-1/8 & 10-3/8 & 5.2 \\
\hline & 976B & 1-11/16 & 2-3/8 & 10-3/8 & 1-1/8 & 10-3/8 & 5.2 \\
\hline & 977A & 1-13/16 & 2-5/8 & 10-7/8 & 1-1/8 & 10-7/8 & 6.5 \\
\hline & 978A & 2 & 2-7/8 & 11 & 1-1/4 & 11-3/8 & 7.0 \\
\hline
\end{tabular}
\begin{tabular}{lllllll} 
& & \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \[
\begin{aligned}
& \text { Part } \\
& \text { No. }
\end{aligned}
\] & \[
\underset{A}{\text { OFFSET HAI }}
\] & LE SOCKET & \[
\begin{aligned}
& \text { WREN } \\
& \text { C }
\end{aligned}
\] & \[
\begin{array}{cc}
-6 & \text { PT. } \\
L
\end{array}
\] & \[
\begin{gathered}
\overline{\text { ARBON }} \\
T
\end{gathered}
\] & \[
\begin{aligned}
& \text { EL Wt. } \\
& \text { Lbs. }
\end{aligned}
\] \\
\hline 261A & 5/16 & 1/2 & 1-5/32 & 3-3/8 & 9/32 & 12 \\
\hline 262D & 3/8 & 5/8 & 1-1/2 & 3-7/8 & 3/8 & 15 \\
\hline 263D & 7/16 & 23/32 & 1-7/16 & 4-3/4 & 3/8 & 17 \\
\hline 264A & 1/2 & 3/4 & 1-5/8 & 5-1/8 & 3/8 & 20 \\
\hline 265D & 9/16 & 7/8 & 1-7/8 & 5-7/8 & 7/16 & 40 \\
\hline 266D & 5/8 & 1 & 2-1/16 & 6-1/2 & 1/2 & 48 \\
\hline 267A & 11/16 & 1-5/32 & 2-3/16 & 6-49/64 & 9/16 & 80 \\
\hline 267D & 3/4 & 1-5/32 & 2-3/16 & 6-49/64 & 9/16 & 80 \\
\hline 268D & 13/16 & 1-1/4 & 2-7/16 & 7-1/2 & 5/8 & 94 \\
\hline 269A & 7/8 & 1-3/8 & 2-7/8 & 8-3/8 & 5/8 & 1.2 \\
\hline 270D & 1 & 1-1/2 & 2-7/8 & 10-1/4 & 11/16 & 1.6 \\
\hline 270S & 15/16 & 1-1/2 & 2-7/8 & 10-1/4 & 11/16 & 1.6 \\
\hline 271A & 1-1/16 & 1-5/8 & 3-1/8 & 10 & 3/4 & 1.7 \\
\hline 271D & 1-1/8 & 1-5/8 & 3-1/8 & 10 & 3/4 & 1.7 \\
\hline 273A & 1-1/4 & 1-7/8 & 3-5/8 & 11-5/8 & 7/8 & 2.4 \\
\hline 273B & 1-5/16 & 1-7/8 & 3-5/8 & 11-5/8 & 7/8 & 2.4 \\
\hline 275A & 1-7/16 & 2-1/8 & 4-1/16 & 13-1/4 & 15/16 & 3.8 \\
\hline 275D & 1-1/2 & 2-1/8 & 4-1/16 & 13-1/4 & 15/16 & 3.8 \\
\hline 276A & 1-5/8 & 2-3/8 & 4-1/2 & 14-7/8 & 1 & 5.3 \\
\hline 276B & 1-11/16 & 2-3/8 & 4-1/2 & 14-7/8 & 1 & 5.3 \\
\hline 277A & 1-13/16 & 2-1/2 & 5 & 16-1/2 & 1-1/8 & 6.1 \\
\hline 278A & 2 & 2-7/8 & 5-1/2 & 18 & 1-1/8 & 8.5 \\
\hline
\end{tabular}

Ref.: Fed. Spec. GGG-W-641b, Type 3, Class 1.



\section*{PIN SPANNER}

Single Pin design to be used in one of the notches of a round nut.
\begin{tabular}{llrrlc}
\hline \begin{tabular}{c} 
Stock \\
Number
\end{tabular} & \begin{tabular}{c} 
For Circle Diameter \\
Diameter \\
of Pin
\end{tabular} & \begin{tabular}{c} 
Length \\
of Pin
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Approx. \\
Weight \\
Each \\
Lbs.
\end{tabular} \\
\hline 452 & 1 & \(3 / 16\) & \(3 / 16\) & 4 & .05 \\
453 & \(1-1 / 4\) & \(13 / 64\) & \(3 / 16\) & \(4-1 / 2\) & .10 \\
454 & \(1-1 / 2\) & \(7 / 32\) & \(7 / 32\) & 5 & .13 \\
455 & \(1-3 / 4\) & \(15 / 64\) & \(7 / 32\) & \(5-1 / 2\) & .18 \\
456 & 2 & \(1 / 4\) & \(1 / 4\) & 6 & .23 \\
457 & \(2-1 / 4\) & \(17 / 64\) & \(1 / 4\) & \(6-1 / 2\) & .25 \\
458 & \(2-1 / 2\) & \(9 / 32\) & \(9 / 32\) & 7 & .31 \\
459 & \(2-3 / 4\) & \(19 / 64\) & \(9 / 32\) & \(7-1 / 2\) & .37 \\
460 & 3 & \(5 / 16\) & \(5 / 16\) & 8 & .43 \\
461 & \(3-1 / 4\) & \(21 / 64\) & \(5 / 16\) & \(8-1 / 2\) & .50 \\
462 & \(3-1 / 2\) & \(11 / 32\) & \(5 / 16\) & 9 & .57 \\
462 A & \(3-1 / 2\) & \(5 / 16\) & \(5 / 16\) & 9 & .57 \\
463 & \(3-3 / 4\) & \(23 / 64\) & \(3 / 8\) & \(9-1 / 2\) & .66 \\
464 & 4 & \(3 / 8\) & \(7 / 16\) & 10 & .76 \\
466 & 5 & \(7 / 16\) & \(7 / 16\) & 12 & 1.0 \\
468 & 6 & \(1 / 2\) & \(1 / 2\) & 14 & 1.5 \\
\hline
\end{tabular}

Federal Specifications: GGG-W-665, Type II, Grade A

\section*{ADJUSTABLE FACE SPANNER}

Adjustable Face Spanner is used like the Face Spanner shown above, but, because it is adjustable, a single Spanner may be used with a number of round nuts of various sizes.
\begin{tabular}{lcccccc}
\hline \begin{tabular}{c} 
Stock \\
Number
\end{tabular} & \begin{tabular}{c} 
Capacity \\
for Circles \\
Diameter
\end{tabular} & \begin{tabular}{c} 
Thick- \\
ness \\
of \\
Handle
\end{tabular} & \begin{tabular}{c} 
Thick- \\
ness \\
of \\
Hook
\end{tabular} & \begin{tabular}{c} 
Depth \\
of \\
Hook
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} & \begin{tabular}{c} 
Approx. \\
Weight \\
Each \\
Lbs.
\end{tabular} \\
\hline 471 & \(3 / 4\) to 2 & \(1 / 4\) & \(11 / 32\) & \(1 / 8\) & \(6-3 / 8\) & .25 \\
472 & \(1-1 / 4\) to 3 & \(9 / 32\) & \(13 / 32\) & \(5 / 32\) & \(8-1 / 8\) & .44 \\
474 & 2 & to \(4-3 / 4\) & \(5 / 16\) & \(15 / 32\) & \(3 / 16\) & \(11-3 / 8\) \\
474 A & \(4-1 / 2\) to \(6-1 / 4\) & \(5 / 16\) & \(15 / 32\) & \(1 / 4\) & \(12-1 / 8\) & 1.1 \\
\hline
\end{tabular}

Federal Specifications: GGG-W-665, Type III, Class 1

\section*{ADJUSTABLE HOOK SPANNER}

Adjustable Hook Spanner is strong - easily adjustable to a wide range of sizes. Ideal for use with spindle bearings or for adjusting the collars and slotted rings used on many automatic machines.
\begin{tabular}{cccccc}
\hline \begin{tabular}{c} 
Stock \\
Number
\end{tabular} & \begin{tabular}{c} 
Extreme \\
Capacity
\end{tabular} & \begin{tabular}{c} 
Diameter \\
of Pin
\end{tabular} & & \begin{tabular}{c} 
Length \\
of Pin
\end{tabular} & \begin{tabular}{c} 
Overall \\
Length
\end{tabular} \\
\begin{tabular}{c} 
Approx. \\
Weight \\
Each \\
Lbs.
\end{tabular} \\
\hline 482 & 2 & \(3 / 16\) & \(1 / 4\) & \(6-3 / 8\) & .25 \\
483 & 3 & \(1 / 4\) & \(1 / 4\) & \(8-1 / 4\) & .50 \\
484 & 4 & \(5 / 16\) & \(1 / 2\) & \(10-3 / 8\) & 1.0 \\
\hline
\end{tabular}
 deep throat of ample size and dependable strength at minimum weight. Screws are drop forged in one piece and threaded for strength and rapid adjustment.

Bonney "C" clamps are made of the finest available material. Clamp bodies are machined from a special high tensile ductile alloy which has the strength of forged steel. All Bonney "C" clamps have the new swivel PERMA-PAD which will never come off off

\section*{HEAVY DUTY CLAMPS}
\begin{tabular}{ccccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Maximum \\
Opening
\end{tabular} & \begin{tabular}{c} 
Minimum \\
Opening
\end{tabular} & \begin{tabular}{c} 
Recessed \\
Opening
\end{tabular} & Width & Length & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline CC104 & 4 & 0 & \(2-1 / 4\) & \(4-11 / 16\) & \(10-7 / 8\) & 3.000 \\
\hline CC106 & 6 & 2 & \(2-3 / 8\) & 5 & \(12-13 / 16\) & 5.562 \\
\hline CC108 & 8 & 4 & \(2-5 / 8\) & \(5-1 / 4\) & 15 & 6500 \\
\hline CC110 & 10 & 6 & \(2-7 / 8\) & \(5-19 / 32\) & 17 & 7.750 \\
\hline
\end{tabular}

REGULAR CLAMPS
\begin{tabular}{lrllllll}
\hline CC402 & 2 & 0 & \(1-3 / 4\) & \(3-7 / 16\) & \(6-5 / 16\) & 1.500 \\
\hline CC403 & 3 & 0 & 2 & \(3-5 / 8\) & \(8-5 / 16\) & 2.500 \\
\hline CC404 & 4 & 0 & \(2-3 / 8\) & \(4-1 / 2\) & \(9-11 / 16\) & 3.000 \\
\hline CC406 & 6 & 0 & 3 & \(5-3 / 4\) & 12 & 3.562 \\
\hline CC408 & 8 & 0 & \(3-3 / 8\) & \(5-7 / 8\) & \(14-1 / 4\) & 5.500 \\
\hline CC 410 & 10 & 2 & \(3-3 / 4\) & 7 & \(16-7 / 16\) & 7.250 \\
\hline \(\mathrm{CC412}\) & 12 & 2 & - & - & - & -- \\
\hline
\end{tabular}


Bonney open end Metric wrenches designed to cover the popular size nuts and bolts of Metric standards. These wrenches are drop forged of alloy steel, nickel chrome plated, and finished to close tolerances. These streamlined wrenches are especially thin but still retain maximum strength.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Part No.} & \multicolumn{2}{|l|}{Wrench Opening MM} & \multirow[b]{2}{*}{C} & \multicolumn{2}{|r|}{OPEN EN} & \multicolumn{2}{|l|}{WRENCHES} & \multirow[b]{2}{*}{T} & \multirow[t]{2}{*}{Wt. Lbs.} \\
\hline & A & B & & D & E & F & L & & \\
\hline ME68 & 6 & 8 & 1/4 & 5/16 & 9/16 & 11/16 & 4-1/4 & 5/32 & 025 \\
\hline ME79 & 7 & 9 & 5/16 & 13/32 & 11/16 & 13/16 & 4-3/4 & 3/16 & 060 \\
\hline ME1012 & 10 & 12 & 13/32 & 15/32 & 13/16 & 15/16 & 5-1/4 & 7/32 & 075 \\
\hline ME1113 & 11 & 13 & 29/64 & 33/64 & 15/16 & 1-1/16 & 5-3/4 & 15/64 & 113 \\
\hline ME1416 & 14 & 16 & 17/32 & 5/8 & 1-1/16 & 1-3/16 & 6-1/4 & \(1 / 4\) & 144 \\
\hline ME1517 & 15 & 17 & 39/64 & 11/16 & 1-3/16 & 1-5/16 & 7 & 17/64 & 197 \\
\hline ME1819 & 18 & 19 & 45/64 & 47/64 & 1-5/16 & 1-7/16 & 7-3/4 & 9/32 & 263 \\
\hline ME2022 & 20 & 22 & 13/16 & 7/8 & 1-9/16 & 1-11/16 & 9-1/4 & 11/32 & 406 \\
\hline ME2123 & 21 & 23 & 27/32 & 15/16 & 1-11/16 & 1-13/16 & 10 & 23/64 & 538 \\
\hline ME2425 & 24 & 25 & 31/32 & 1 & 1-13/16 & 1-15/16 & 10-3/4 & 3/8 & 625 \\
\hline
\end{tabular}


These combination wrenches in Metric standards are finished the same as the above open end wrenches, machined to close tolerances for best fit for specific jobs.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{\begin{tabular}{l}
Part \\
No.
\end{tabular}} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Opening } \\
\mathrm{M} \mathbf{M} \\
\mathrm{~A}
\end{gathered}
\]} & \multirow[b]{2}{*}{C} & \multicolumn{2}{|l|}{COMBINATION} & \multicolumn{2}{|l|}{WRENCHES} & \multirow[b]{2}{*}{Tb} & \multirow[t]{2}{*}{Wt. Lbs.} \\
\hline & & & E & F & L & Ta & & \\
\hline MEB7 & 7 & \(9 / 32\) & 19/32 & 7/16 & 3 & 5/32 & 3/16 & 025 \\
\hline MEB8 & 8 & 21/64 & 25/32 & 1/2 & 3-3/4 & 11/64 & 7/32 & 044 \\
\hline MEB9 & 9 & 21/64 & 25/32 & \(1 / 2\) & 3-3/4 & 11/64 & 7/32 & 044 \\
\hline MEB10 & 10 & 25/64 & 27/32 & 9/16 & 4-1/2 & 3/16 & 1/4 & 063 \\
\hline MEB11 & 11 & 29/64 & 29/32 & 21/32 & 5-3/16 & 7/32 & 5/16 & 081 \\
\hline MEB12 & 12 & 33/64 & 1-1/16 & 47/64 & 5-15/16 & \(1 / 4\) & \(5 / 16\) & 128 \\
\hline MEB13 & 13 & \(33 / 64\) & 1-1/16 & 47/64 & 5-15/16 & 1/4 & 5/16 & 128 \\
\hline MEB14 & 14 & 37/64 & 1-7/32 & \(53 / 64\) & 6-11/16 & 9/32 & 11/32 & 181 \\
\hline MEB15 & 15 & 37/64 & 1-7/32 & 53/64 & 6-11/16 & 9/32 & 11/32 & 181 \\
\hline MEB16 & 16 & 41/64 & 1-11/32 & 29/32 & 7-7/16 & 5/16 & 3/8 & 264 \\
\hline MEB17 & 17 & 45/64 & 1-15/32 & 1 & 8-5/16 & 11/32 & 13/32 & 338 \\
\hline MEB18 & 18 & 45/64 & 1-15/32 & 1 & 8-5/16 & 11/32 & 13/32 & 338 \\
\hline MEB19 & 19 & 25/32 & 1-9/16 & 1-5/64 & 9-3/16 & 3/8 & 7/16 & 406 \\
\hline
\end{tabular}



Type
c


Type

\section*{3/8-INTH DRIVE SOCKETS}

These Bonney Metric standard sockets are made of alloy steel especially designed for perfect fit for most Metric nuts and bolts. See Page 3 of this section for information on sets containing these sockets.
\begin{tabular}{cccccccc}
\hline \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Opening \\
MM.
\end{tabular} & Type & \multicolumn{5}{c}{\begin{tabular}{c} 
Diameter \\
(A)
\end{tabular}} \\
\hline MT-7 & 7 & a & \(13 / 32\) & \(21 / 32\) & \begin{tabular}{c} 
Nose \\
(e)
\end{tabular} & \begin{tabular}{c} 
Length \\
(L)
\end{tabular} & \begin{tabular}{c} 
Weight \\
Lbs.
\end{tabular} \\
\hline MT-8 & 8 & a & \(29 / 64\) & \(21 / 32\) & \(1 / 2\) & 1 & .030 \\
\hline MT-9 & 9 & a & \(1 / 2\) & \(21 / 32\) & \(1 / 2\) & 1 & .033 \\
\hline MT-10 & 10 & a & \(9 / 16\) & \(21 / 32\) & \(1 / 2\) & 1 & .035 \\
\hline MT-11 & 11 & a & \(39 / 64\) & \(21 / 32\) & \(1 / 2\) & 1 & .038 \\
\hline MT-12 & 12 & b & \(21 / 32\) & \(21 / 32\) & \(\ldots .\). & 1 & .040 \\
\hline MT-13 & 13 & b & \(23 / 32\) & \(23 / 32\) & \(\ldots .\). & 1 & .041 \\
\hline MT-14 & 14 & b & \(49 / 64\) & \(49 / 64\) & \(\ldots\). & 1 & .042 \\
\hline MT-15 & 15 & b & \(13 / 16\) & \(13 / 16\) & \(\ldots\). & 1 & .044 \\
\hline MT-16 & 16 & b & \(55 / 64\) & \(55 / 64\) & \(\ldots\). & 1 & .050 \\
\hline MT-17 & 17 & b & \(57 / 64\) & \(57 / 64\) & \(\ldots\). & 1 & .055 \\
\hline MT-18 & 18 & b & \(59 / 64\) & \(59 / 64\) & \(\ldots\). & \(\mathbf{1}\) & .068 \\
\hline MT-19 & 19 & c & 1 & \(11 / 16\) & \(11 / 32\) & \(1-7 / 32\) & .075 \\
\hline
\end{tabular}



The above listed box wrenches meet the rigid specifications of all Bonney wrenches, made of alloy steel with nickel chrome plate.

\section*{M200R}

Set consists of 5 popular size combination wrenches and comes in plastic roll LR70. 5 PIECES, SHIPPING WEIGHT. 928 LBS.

\section*{M205R}

Set consists of 7 popular size combination wrenches in Metric standard. Comes in plastic roll LR80. 7 PIECES, SHIPPING WEIGHT 2.500 LBS.
\begin{tabular}{lc}
\hline No. & \begin{tabular}{c} 
Opening \\
MM
\end{tabular} \\
\hline MEB10 & 10 \\
\hline MEB11 & 11 \\
\hline MEB12 & 12 \\
\hline MEB13 & 13 \\
\hline MEB14 & 14 \\
\hline LR70 & Plastic Roll
\end{tabular}
\begin{tabular}{lc}
\hline \multicolumn{1}{c}{ No. } & \begin{tabular}{c} 
Opening \\
MM
\end{tabular} \\
\hline MEB8 & 8 \\
\hline MEB9 & 9 \\
\hline MEB10 & 10 \\
\hline MEB11 & 11 \\
\hline MEB12 & 12 \\
\hline MEB13 & 13 \\
\hline MEB14 & 14 \\
\hline LR80 & Plastic Roll \\
\hline
\end{tabular}


\section*{M215B}

Popular size sockets with new design Bonney ratchet. This set is sold in metal box MB36. 8 PIECES, SHIPPING WEIGHT 2.719 LBS.
\begin{tabular}{lcr}
\hline \multicolumn{1}{c}{ No. } & Opening MM & Length \\
\hline MT8 & 8 & \(29 / 32\) \\
\hline MT9 & 9 & \(29 / 32\) \\
\hline MT10 & 10 & \(29 / 32\) \\
\hline MT11 & 11 & \(29 / 32\) \\
\hline MT12 & 12 & \(29 / 32\) \\
\hline MT13 & 13 & \(29 / 32\) \\
\hline MT14 & 14 & \(29 / 32\) \\
\hline T701 & \(6-1 / 2^{\prime \prime}\) Ratchet \\
\hline MB36 & \multicolumn{2}{r}{ Metal Box } \\
\hline
\end{tabular}

\section*{M230B}

Popular size sockets and wrenches, plus an extension hinge handle and the new design Bonney ratchet. The set is sold in metal box MB44. 17 PIECES, SHIPPING WEIGHT 6.875 LBS.

Width \(13^{\prime \prime}\)
Depth \({ }^{1 \prime \prime}\) Height 1-7/8"

ATTACHMENTS


METRIC SOCKETS

\section*{M230B}

Width 18-1/4"
Depth 4-5/8"
Height 1-5/8"
\begin{tabular}{llr}
\hline \multicolumn{2}{l}{ Tool No. } & \multicolumn{2}{l}{ Description } \\
\hline \multicolumn{2}{c}{ T606 } & \(6^{\prime \prime}\) Extensian \\
\hline T701 & \(6-1 / 2^{\prime \prime}\) Reversible Ratchet \\
\hline T720 & \(7-5 / 8^{\prime \prime}\) & Hinge Handle \\
\hline WRENCHES \\
\multicolumn{2}{l}{ WRE No. } & Opening MM \\
\hline Tool Length \\
\hline MEB8 & 8 & \(3-3 / 4\) \\
\hline MEB9 & 9 & \(3-3 / 4\) \\
\hline MEB10 & 10 & \(4-1 / 2\) \\
\hline MEB11 & 11 & \(5-3 / 16\) \\
\hline MEB12 & 12 & \(5-15 / 16\) \\
\hline MEB13 & 13 & \(5-15 / 16\) \\
\hline MEB14 & 14 & \(6-11 / 16\) \\
\hline MB44 & & Metal Box \\
\hline
\end{tabular}

\section*{3/8 INCH SQUARE DRIVE SOCKETS}

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Approx. Opening Inches} & \multirow[b]{2}{*}{Part No.} & \multirow[t]{2}{*}{Whitworth Bolt Size} & \multicolumn{2}{|r|}{Diameter} & \multirow[b]{2}{*}{Nose Length} & \multirow[b]{2}{*}{Length} & \multirow[b]{2}{*}{Weight Lbs.} \\
\hline & & & Head & Drive End & & & \\
\hline 21/64 & WT2 & 4BA & 17/32 & 21/32 & 13/32 & 29/32 & . 041 \\
\hline 11/32 & WT4 & 1/8 & 17/32 & 21/32 & 13/32 & 29/32 & . 041 \\
\hline 29/64 & WT6 & 3/16 & 11/16 & 11/16 & - & 29/32 & . 053 \\
\hline 17/32 & WT8 & 1/4 & 25/32 & 25/32 & - & 29/32 & . 072 \\
\hline 39/64 & WT10 & 5/16 & 27/32 & 27/32 & - & 15/16 & . 084 \\
\hline 23/32 & WT12 & 3/8 & 1 & 11/16 & 11/32 & 1-7/32 & . 119 \\
\hline 53/64 & WT14 & 7/16 & 1-5/32 & 3/4 & 11/32 & 1-9/32 & . 175 \\
\hline 15/16 & WT16 & 1/2 & 1-1/4 & 27/32 & 11/32 & 1-9/32 & . 188 \\
\hline
\end{tabular}

Bonney offers the above range of sockets to meet the ever increasing demand for Whitworth standards. See Page 6 of this section for various sets containing many of these sockets.

\section*{OPEN END WRENCHES}


\section*{ewer}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Approx. Opening Inches & Part
No. & & Size worth Large & \multicolumn{2}{|l|}{\begin{tabular}{l}
Head Diameter \\
Small Large
\end{tabular}} & Length & \multicolumn{2}{|l|}{Head Weight Thkns. Lbs.} \\
\hline 29/64x 11/32 & WE46 & 1/8 & 3/16 & 13/16 & 15/16 & 5-1/4 & 7/32 & 075 \\
\hline 39/64x 17/32 & WE810 & 1/4 & 5/16 & 1-1/16 & 1-3/16 & 6-1/4 & 1/4 & . 138 \\
\hline 53/64x 23/32 & WE1214 & 3/8 & 7/16 & 1-7/16 & 1-9/16 & 8-1/2 & 5/16 & . 325 \\
\hline 1-1/64x 15/16 & WE1618 & 1/2 & 9/16 & 1-13/16 & 2 & 11-1/8 & 13/32 & . 725 \\
\hline 1-5/16x1-7/64 & WE2024 & 5/8 & 3/4 & 2-1/4 & 2-5/8 & 13-5/8 & 1/2 & 45 \\
\hline
\end{tabular}

\section*{TAPPET WRENCHES}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Approx. \\
Opening Inches
\end{tabular}} & \multirow[b]{2}{*}{Part
No.} & \multicolumn{2}{|l|}{Whitworth Opening} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Head Diameter Small Large}} & \multirow[b]{2}{*}{\[
\begin{gathered}
\text { Length } \\
\text { L }
\end{gathered}
\]} & \multirow[b]{2}{*}{Weight Lbs.} \\
\hline & & Small & Large & & & & \\
\hline 17/32x29/64 & WET68 & 3/16 & 1/4 & 1/2 & 19/32 & 9-1/2 & . 191 \\
\hline 23/32x39/64 & WET1012 & 5/16 & 3/8 & 11/16 & 3/4 & 9-1/2 & . 219 \\
\hline
\end{tabular}

These 2 Tappet wrenches are of the popular size made of drop forged alloy steel with nickel chrome plate. As in all Bonney wrenches, close tolerances are maintained for perfect fit.

\section*{COMBINATION WRENCHES-12 POINT}

\begin{tabular}{lcccccc}
\hline \begin{tabular}{c} 
Approx. \\
Opening \\
Inches
\end{tabular} & \begin{tabular}{c} 
Part \\
No.
\end{tabular} & \begin{tabular}{c} 
Whitworth \\
Opening
\end{tabular} & \multicolumn{2}{c}{\begin{tabular}{c} 
Head Diameter \\
O.E.
\end{tabular}} & Box & Length \\
L & Weight \\
\hline \(11 / 32\) & WEB4 & \(1 / 8\) & \(27 / 32\) & \(9 / 16\) & \(4-1 / 2\) & .063 \\
\hline \(29 / 64\) & WEB6 & \(3 / 16\) & \(29 / 32\) & \(21 / 32\) & \(5-3 / 16\) & .081 \\
\hline \(17 / 32\) & WEB8 & \(1 / 4\) & \(1-1 / 16\) & \(47 / 64\) & \(5-15 / 16\) & .128 \\
\hline \(39 / 64\) & WEB10 & \(5 / 16\) & \(1-7 / 32\) & \(53 / 64\) & \(6-11 / 16\) & .181 \\
\hline \(23 / 32\) & WEB12 & \(3 / 8\) & \(1-15 / 32\) & 1 & \(8-5 / 16\) & .338 \\
\hline \(53 / 64\) & WEB14 & \(7 / 16\) & \(1-11 / 16\) & \(1-11 / 64\) & \(10-1 / 4\) & .575 \\
\hline \(15 / 16\) & WEB16 & \(1 / 2\) & \(1-13 / 16\) & \(1-1 / 4\) & \(11-1 / 4\) & .675 \\
\hline
\end{tabular}

\section*{BOX WRENCHES}


\section*{W100R}

Set consists of 5 popular size combination wrenches and comes in plastic roll LR70. 5 PIECES, SHIPPING WEIGHT . 884 LBS.

\section*{W105R}

This set consists of 7 popular size combination wrenches in Whitworth standard. Comes in plastic roll LR80. 7 PIECES, SHIPPING WT. 2.500 LBS.

\section*{W115B}

This set consists of 8 pieces of the popular size sockets with the new design Bonney ratchet. This set is sold in metal box MB36. 8 PIECES, SHIPPING WEIGHT 2.719 LBS.
\begin{tabular}{lc}
\hline \begin{tabular}{c} 
Tool \\
No.
\end{tabular} & \begin{tabular}{c} 
Whitworth Standard \\
Nuts; Size Bolts
\end{tabular} \\
\hline WEB4 & \(1 / 8\) \\
\hline WEB6 & \(3 / 16\) \\
\hline WEB8 & \(1 / 4\) \\
\hline WEB10 & \(5 / 16\) \\
\hline WEB12 & \(3 / 8\) \\
\hline LR70 & Plastic Roll \\
\hline
\end{tabular}

\begin{tabular}{lcr}
\hline \multicolumn{3}{c}{ Whitworth Standard } \\
No. & Size Bolts & Length \\
WT4 & \(1 / 8\) & \(29 / 32\) \\
\hline WT6 & \(3 / 16\) & \(29 / 32\) \\
WT8 & \(1 / 4\) & \(29 / 32\) \\
\hline WT10 & \(5 / 16\) & \(15 / 16\) \\
\hline WT12 & \(3 / 8\) & \(1-3 / 16\) \\
\hline WT14 & \(7 / 16\) & \(1-9 / 32\) \\
\hline WT16 & \(1 / 2\) & \(1-9 / 32\) \\
\hline T701 & \(\mathbf{6 - 1 / 2}\) & \\
\hline MB36 & Metatchet & \\
\hline
\end{tabular}

W120B - Popular size sockets and the Bonney hinge handle T720. This set is sold in metal box MB36. 8 PIECES, SHIPPING WEIGHT 2.625 LBS.

W130B - Popular size sockets and wrenches, plus an extension hinge handle and the new design Bonney ratchet. The set is sold in metal box MB44. 17 PIECES, SHIPPING WEIGHT 6.875 LBS.
\begin{tabular}{lcc}
\hline \multicolumn{1}{c}{ No. } & \multicolumn{2}{c}{ Bolt Size } \\
\hline Length \\
\hline WT4 & \(1 / 8\) & \(29 / 32\) \\
\hline WT6 & \(3 / 16\) & \(29 / 32\) \\
\hline WT8 & \(1 / 4\) & \(29 / 32\) \\
\hline WT10 & \(5 / 16\) & \(15 / 16\) \\
\hline WT12 & \(3 / 8\) & \(1-3 / 16\) \\
\hline WT14 & \(7 / 16\) & \(1-9 / 32\) \\
\hline WT16 & \(1 / 2\) & \(1-9 / 32\) \\
\hline T720 & \(7-5 / 8^{\prime \prime}\) Hge. Hdl. \\
\hline MB36 & \multicolumn{2}{c}{ Metal Box } \\
\hline
\end{tabular}

Width \(13^{\prime \prime}\)
Depth 3"
Height 1-7/8"
\begin{tabular}{|c|c|c|c|c|}
\hline & \multicolumn{3}{|l|}{SOCKETS} & \multirow[b]{2}{*}{ATTACHMENTS} \\
\hline & Tool No. & Bolt Siz & Length & \\
\hline & WT4 & 1/8 & 29/32 & AT4 \\
\hline & WT6 & 3/16 & 29/32 & 6 " Wobble Drive \\
\hline & WT8 & 1/4 & 29/32 & T701 \\
\hline & WT10 & 5/16 & 15/16 & 6-1/2" Reversible Ratchet \\
\hline & WT12 & 3/8 & 1-3/16 & \({ }_{7-5 / 8^{\prime \prime}}\) T720 \\
\hline & WT14 & 7/16 & 1-9/32 & 7-5/8" Hinge Handle \\
\hline th \(4.5 / 8^{\prime \prime}\) & WT16 & 1/2 & 1-9/32 & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[b]{2}{*}{ATTACHMENTS} & \multicolumn{3}{|l|}{WRENCHES} \\
\hline & Tool No. & Bolt Siz & Length \\
\hline AT4 & WEB4 & 1/8 & 4-1/2 \\
\hline \(6{ }^{\prime \prime}\) Wobble Drive & WEB6 & 3/16 & 5-3/16 \\
\hline T701 & WEB8 & 1/4 & 5-15/16 \\
\hline 6-1/2" Reversible Ratchet & WEB10 & 5/16 & 6-11/16 \\
\hline T720 & WEB12 & 3/8 & 8-5/16 \\
\hline 7-5/8" Hinge Handle & WEB14 & 7/16 & 10-1/4 \\
\hline & WEB16 & 1/2 & 11-1/4 \\
\hline
\end{tabular}


VM5B - The tools contained in this set are especially handy for working with electrical, radio, and ignition equipment. Sold in metal box MB12. 23 PIECES, SHIPPING WEIGHT 2.095 LBS.
MINIATURE OPEN-END WRENCHES
\begin{tabular}{|c|c|}
\hline Part No. & Description \\
\hline H10 & 3/16" \& 7/32" O E Min. Wrench \\
\hline H12 & \(1 / 4^{\prime \prime}\) \& \(9 / 32^{\prime \prime}\) O E Min. Wrench \\
\hline H14 & \(5 / 16^{\prime \prime}\) \& \(11 / 32^{\prime \prime} \mathrm{O}\) E Min. Wrench \\
\hline H16 & 3/8" \& 7/16" O E Min. Wrench \\
\hline H18 & \(13 / 32^{\prime \prime}\) \& \(15 / 32^{\prime \prime} \mathrm{O}\) E Min. Wrench \\
\hline 001-2 & Screw Driver \\
\hline
\end{tabular}

\section*{1/4" SQUARE DRIVE SOCKETS AND ATTACHMENTS}

\section*{VM5B}

\begin{tabular}{|ccc} 
Part No. & Description \\
\hline VS8 & \(1 / 4^{\prime \prime}\) & 8 Point Socket \\
VS10 & \(5 / 16^{\prime \prime}\) & 8 Point Socket \\
VS12 & \(3 / 8^{\prime \prime}\) & 8 Point Socket \\
V730 & Sliding "'T" Handle, 4-1/2" Long \\
V606 & Extension, \(6^{\prime \prime}\) Long \\
V602 & Extension, \(2^{\prime \prime}\) Long \\
V780 & Screwdriver Handle, \(6^{\prime \prime}\) Long \\
V720 & Hinge Handle, 5-3/4" Long \\
V775 & Cross Handle, \(3-1 / 2^{\prime \prime}\) Long \\
\hline
\end{tabular}


V50B
Width 6-1/2"
Depth 4-13/16"
Height 1-3/16"


Width 6-1/2"
Depth 4-13/16"
Height 1-3/16"

V50B - The tools in this set are the popular \(1 / 4^{\prime \prime}\) drive sockets and attachments for small repair jobs. Sold in metal box MB12. 14 PIECES, SHIPPING WEIGHT 1.438 LBS.
\begin{tabular}{lr|cccc}
\hline Part & & & \\
No. & Description & & Part & & No.
\end{tabular}

V51B - This set consists of tools which are especially useful in adjusting distributors, carburetor, and generators, packed in metal box MB12. 17 PIECES, SHIPPING WEIGHT 1.813 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline V6 & 3/16" 12 Point Socket & VS10 & 5/16" 8 Point Socket \\
\hline V7 & 7/32" 12 Point Socket & VS12 & 3/8" 8 Point Socket \\
\hline V8 & 1/4" 12 Point Socket & V730 & Sliding "T" Handle, \\
\hline V9 & 9/32" 12 Point Socket & & 4-1/2" Long \\
\hline V10 & \(5 / 16^{\prime \prime} 12\) Point Socket & V606 & Extension, \(6^{\prime \prime}\) Long \\
\hline V11 & 11/32"12 Point Socket & V602 & Extension, \(2^{\prime \prime}\) Long \\
\hline V12 & 3/8" 12 Point Socket & V780 & Screwdriver Handle, 6" Long \\
\hline V14 & 7/16" 12 Point Socket & V720 & Hinge Handle, 5-3/4" Long \\
\hline VS8 & 1/4" 8 Point Socket & V775 & Cross Handle, 3-1/2" Long \\
\hline
\end{tabular}

V53B - The tools contained in this set are also handy for working with electrical and ignition equipment. Packed in metal Box MB12. 12 PIECES, SHIPPING WEIGHT 1.345 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & \begin{tabular}{l}
Part \\
No.
\end{tabular} & Description \\
\hline V6 & 3/16" 12 Point Socket & V12 & 3/8" 12 Point Socket \\
\hline V7 & 7/32" 12 Point Socket & V14 & 7/16"12 Point Socket \\
\hline V8 & 1/4" 12 Point Socket & VS8 & 1/4" 8 Point Socket \\
\hline V9 & 9/32" 12 Point Socket & VS10 & \begin{tabular}{l}
5/16" 8 Point Socket \\
3/8" 8 Point Socket
\end{tabular} \\
\hline V10 & 5/16" 12 Point Socket & V701 & Reversible Ratchet, \\
\hline V11 & 11/32"12 Point Socket & & 4-1/2" Long \\
\hline
\end{tabular}

V54B - The electrical mechanic will use this set to advantage. The deep sockets will be of great value in reaching those hard to get nuts and bolts. Packed in metal box MB12. 12 PIECES, SHIPPING WEIGHT 1.657 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Pa & Description & Pa & Description \\
\hline VL6 & 3/16" 12 Point Deep Socket & VL12 & 3/8 12 \\
\hline VL7 & 7/32"12 Point Deep Socket & VL14 & 7/16"12 Point Deep S \\
\hline VL8 & 1/4"12 Point Deep Socket & VL16 & 1/2'12 12 Point Deep S \\
\hline VL9 & 9/32"12 Point Deep Socket & V606 & Extension, \(6^{\prime \prime}\) Long \\
\hline VL10 & 5/16" 12 Point Deep Socket & V602 & Extension, \(2^{\prime \prime}\) Long \\
\hline VL11 1 & 11/32" 12 Point Deep Soc & V & Spinner Hinge \\
\hline
\end{tabular}

\section*{TOOL SETS \(3 / 8\) INCH SQUARE DRIVE}

TB3R - The tools in this set are especially handy for body and door frame work where extra force is required in breaking loose or setting screws, packed in plastic roll LR5. 9 PIECES, SHIPPING WEIGHT . 375 LBS.


TD1B - This set consists of the popular \(3 / 8^{\prime \prime}\) square drive sockets and the new \(3 / 8^{\prime \prime}\) square drive Bonney ratchet. Packed in metal box MB36. 7 PIECES, SHIPPING WEIGHT 2.157 LBS.
\begin{tabular}{cc} 
Part & \\
No. & Description \\
\hline T10 & \(5 / 16^{\prime \prime}\) \\
T12 Point Socket \\
T12 & \(3 / 8^{\prime \prime}\) \\
12 Point Socket \\
T14 & \(7 / 16^{\prime \prime}\) \\
12 & Point Socker
\end{tabular}
\begin{tabular}{|cc} 
Part & \\
No. & Description \\
\hline T16 & \(1 / 2^{\prime \prime} 12\) Point Socket \\
T18 & \(9 / 16^{\prime \prime} 12\) Point Socket \\
T20 & \(5 / 8^{\prime \prime}\) \\
& 12 Point Socket \\
T701 & Reversible Ratchet, \(7^{\prime \prime}\)
\end{tabular}

TD2B - The tools in this box are the same as in TD1B with the exception of the sockets being 6 point instead of 12 point. Packed in metal box MB36. 7 PIECES, SHIPPING WEIGHT 2.125 LBS.
\begin{tabular}{cc} 
Part & \\
No. & Description \\
\hline TH10 & \(5 / 16^{\prime \prime} 6\) Point Socket \\
TH12 & \(3 / 8^{\prime \prime} 6\) Point Socket \\
TH14 & \(7 / 16^{\prime \prime} 6\) Point Socket
\end{tabular}
\begin{tabular}{|cc} 
Part & \\
No. & Description \\
\hline TH16 & \(1 / 2^{\prime \prime}\) \\
TH18 Point Socket \\
TH18 & \(9 / 16^{\prime \prime}\) \\
6 & Point Socket \\
TH20 & \(5 / 8^{\prime \prime}\) \\
T701int Socket \\
T701 & Reversible Ratchet. \(7^{\prime \prime}\)
\end{tabular}

TD2B
Width 13" Depth 3" Height 1-7/8"


Width 21-7/8" Depth 9-1/4" Height 5"

Part No.
\begin{tabular}{|c|c|c|c|c|}
\hline \(\rightarrow\) & & & Part No & Description \\
\hline & & & TS16 & 1/2" 8 Point Socket \\
\hline & & & TS18 & 9/16" 8 Point Socket \\
\hline TD4B & Part No. & Description & TS20 & 5/8" 8 Point Socket \\
\hline Width \(21-7 / 8^{\prime \prime}\) & T760 & Universal Joint & TU14 & 7/16" Flex. 12 Point Socket \\
\hline Depth \(9-1 / 4^{\prime \prime}\) & T606 & Extension, 6" & TU16 & 1/2" Flex. 12 Point Socket \\
\hline Height \(5^{\prime \prime}\) & T612 & Extension, 12" & TU18 & 9/16" Flex. 12 Point Socket \\
\hline & T617 & Extension, 17" & TU20 & 5/8" Flex. 12 Point Socket \\
\hline & T742 & Speeder, 17-1/2" & LT14 & 7/16" Extra Deep Socket \\
\hline & T10 & 5/16" 12 Point Socket & LT16 & 1/2" Extra Deep Socket \\
\hline & T12 & 3/8" 12 Point Socket & LT18 & 9/16" Extra Deep Socket \\
\hline & T14 & 7/16" 12 Point Socket & LT20 & 5/8" Extra Deep Socket \\
\hline & T16 & 1/2" 12 Point Socket & LT22 & 11/16" Extra Deep Socket \\
\hline & T18 & 9/16" 12 Point Socket & LT24 & 3/4" Extra Deep Socket \\
\hline & T19 & 19/32" 12 Point Socket & LT26 & 13/16" Extra Deep Socket \\
\hline & T20 & 5/8" 12 Point Socket & LT28 & 7/8" Extra Deep Socket \\
\hline & T22 & 11/16" 12 Point Socket & T27 & Drag Link Socket \\
\hline & T24 & 3/4" 12 Point Socket & T720 & Hinge Handle, 8-1/2" \\
\hline & T25 & 25/32"12 Point Socket & T603 & Extension, \({ }^{\prime \prime}\) \\
\hline & T26 & 13/16" 12 Point Socket & T775 & Cross Handle, \(6^{\prime \prime}\) \\
\hline & T128 & 7/8" 12 Point Socket & T701 & Reversible Ratchet, \(7^{\prime \prime}\) \\
\hline & TS14 & 7/16" 8 Point Socket & T730 & Sliding "T" Handle, 8" \\
\hline
\end{tabular}

Description

TD4B - This set consists of the small series socket and attachments in a \(3 / 8^{\prime \prime}\) square drive including flexible sockets and the new design Bonney ratchet. Packed in metal box MB60. 39 PIECES, SHIPPING WEIGHT 20.063 LBS.

TD11B - Most of the popular size \(3 / 8^{\prime \prime}\) square drive 12 point sockets are featured in this set in addition to the necessary adjustments and ratchet. Packed in metal box MB36. 12 PIECES, SHIPPING WEIGHT 3.907 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline T10 & 5/16" 12 Point Socket & T20 & \(5 / 8^{\prime \prime} 12\) Point Socket \\
\hline T12 & 3/8" 12 Point Socket & T760 & Universal Joint \\
\hline T14 & 7/16" 12 Point Socket & T606 & Extension, \(6^{\prime \prime}\) \\
\hline T16 & \(1 / 2^{\prime \prime} 12\) Point Socket & T612 & Extension, 12" \\
\hline T18 & 9/16"12 Point Socket & T701 & Reversible Ratchet, 7" \\
\hline T19 & 19/32" 12 Point Socket & T730 & Sliding "T" Handle, 8" \\
\hline
\end{tabular}

TDI1B
Width 13"
Depth \(3^{\prime \prime}\)
Height 1-7/8"

TD14B - A very popular set in \(3 / 8^{\prime \prime}\) square drive consisting of most of the popular 12 point sockets with the necessary attachments and handles. Packed in metal box MB44. 19 PIECES, SHIPPING WEIGHT, 8.000 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & \multirow[b]{2}{*}{Part No.} & \multirow[b]{2}{*}{Description} \\
\hline T10 & 5/16" 12 Point Socket & & \\
\hline T12 & \(3 / 8^{\prime \prime} 12\) Point Socket & T606 & Extension, 6" \\
\hline T14 & 7/16" 12 Point Socket & T612 & Extension, 12" \\
\hline T16 & 1/2" 12 Point Socket & T617 & Extension, 17" \\
\hline T18 & 9/16" 12 Point Socket & T742 & Speeder, 17-1/2" \\
\hline T19 & 19/32" 12 Point Socket & T27 & Drag Link Socket \\
\hline T20 & 5/8"12 Point Socket & T720 & Hinge Handle, 8-1/2" \\
\hline T22 & 11/16" 12 Point Socket & T775 & Cross Handle, \(6^{\prime \prime}\) \\
\hline T24 & 3/4" 12 Point Socket & T701 & Reversible Ratchet, \({ }^{\prime \prime}\) \\
\hline T760 & Universal Joint & T730 & Sliding " T " Handle, 8" \\
\hline
\end{tabular}

\section*{TM10B - This set contains the necessary} sockets and attachments in \(3 / 8^{\prime \prime}\) square drive plus such popular tools as open end wrenches, pliers, screwdrivers, hammers, punches, and chisels. Packed in metal box MB60. 44 PIECES, SHIPPING WEIGHT, 25.188 LBS.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[b]{2}{*}{Part No.} & \multirow[b]{2}{*}{Description} & Part No & Description \\
\hline & & \multicolumn{2}{|l|}{B17 \(6^{\prime \prime}\) Diagonal Cutting Plier} \\
\hline T10 & 5/16" 12 Point Socket & B25 & \(6^{\prime \prime}\) Long Nose Plier \\
\hline T12 & 3/8'12 Point Socket & 04 & Screwdriver, \(1 / 4^{\prime \prime} \times 4^{\prime \prime} \mathrm{Bl}\). \\
\hline T14 & 7/16" 12 Point Socket & 06 & Screwdriver, \(5 / 16^{\prime \prime} \mathrm{x6}^{\prime \prime} \mathrm{Bl}\). \\
\hline T16 & 1/2" 12 Point Socket & S01 & Bl. Adj. Screwdriver \\
\hline T18 & 9/16" 12 Point Socket & & 1/4"x1-3/4" Blade \\
\hline T20 & 5/8" 12 Point Socket & S08 & Bl. Adj. Screwdriver \\
\hline T22 & 11/16" 12 Point Socket & & \(1 / 2^{\prime \prime} \times 8^{\prime \prime}\) Blade \\
\hline T24 & 3/4" 12 Point Socket & \[
006
\] & Screwdriver, 3/16"x6" Bl. \\
\hline T606 & Extension, \(6^{\prime \prime}\) & \[
\mathrm{PH} 2
\] & 2 oz . Ball Pein Hammer \\
\hline T701 & Reversible Ratchet, \(7^{\prime \prime}\) & PH6 & \(3 / 4 \mathrm{lb}\). Ball Pein Hammer \\
\hline T730 & Sliding "T" Handle, 8 " & PH15 & 8 oz . Soft Face Hammer \\
\hline 1159 & 12 Point Comb. Wrench & C3 & 5/8" Cut Blade Chisel \\
\hline 1160 & 3/18" & \({ }^{\text {C26 }}\) & \(1 / 8^{\prime \prime}\) Cut Taper Punch \\
\hline 1161 & 7/16" & C28 & \(1 / 8^{\prime \prime}\) Cut Pin Punch \\
\hline 1162 & 1/2" & C29 & \(3 / 16^{\prime \prime}\) Cut Pin Punch \\
\hline 1163 & 9/16" & C34 & \(5^{\prime \prime}\) Long Center Punch \\
\hline 1164 & 5/8" & 2628 & Hack Saw \\
\hline 1165 & 11/16" & \(6^{\prime \prime}\) & Round Bastard File \\
\hline 1166 & 3/4" & \(8{ }^{\prime \prime}\) & Extra Slim Taper File \\
\hline BW8 & 8" Adj. End Wrench & \(10^{\prime \prime}\) & Half-Round Bastard File \\
\hline B29 & \(7^{\prime \prime}\) Thin Nose, Slip Joint & \# 2 & Small File Handle \\
\hline & Side Cutting Plier & \# 3(2) & Medium File Handles \\
\hline
\end{tabular}

TWB - The tools in this set are made for all popular size set screws or cap screws. Packed in metal box MB8. 8 PIECES, SHIPPING WEIGHT . 845 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline TWB & Set, \(3 / 8^{\prime \prime}\) Drive & TW7 & 7/32 \({ }^{\prime \prime}\) Hex Bit \\
\hline & Socket Head Wrench & TW8 & 1/4" Hex Bit \\
\hline TW4 & 1/8" Hex Bit & TW10 & 5/16" Hex Bit \\
\hline TW5 & 5/32" Hex Bit & TW12 & 3/8 \({ }^{\prime \prime}\) Hex Bit \\
\hline TW6 & 3/16" Hex Bit & AW2-1/2 & xagonal Key \\
\hline
\end{tabular} every mechanic. Consisting of a range of 12 point sockets from \(7 / 16^{\prime \prime}\) opening through \(1^{\prime \prime}\) opening. Packed in metal box MB40. 14 PIECES, SHIPPING WEIGHT 6.500 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline A14 & 7/16" 12 Point Socket & A25 & 25/32" 12 Point Socket \\
\hline A16 & 1/2" 12 Point Socket & A26 & 13/16" 12 Point Socket \\
\hline A18 & 9/16" 12 Point Socket & A28 & \(7 / 8^{\prime \prime} 12\) Point Socket \\
\hline A19 & 19/32" 12 Point Socket & A30 & 15/16" 12 Point Socket \\
\hline A20 & 5/8"12 Point Socket & A32 & \(1^{\prime \prime} 12\) Point Socket \\
\hline A22 & 11/16" 12 Point Socket & A722 & Hinge Handle, \(\mathbf{1 5}^{\prime \prime}\) Long \\
\hline A24 & 3/4" 12 Point Socket & A77 & Cross Handle, \(8^{\prime \prime}\) Long \\
\hline
\end{tabular}

Width 18-3/8'
Depth 2-3/4"
Height 1-7/8"

AA16B - This set consists of a wide range of 12 point sockets in the \(1 / 2^{\prime \prime}\) square drive plus a reversible ratchet. Packed in metal box MB40. 13 PIECES, SHIPPING WEIGHT 5.938 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & . Description \\
\hline A14 & 7/16" 12 Point Socket & A24 & 3/4" 12 Point Socket \\
\hline A16 & 1/2" 12 Point Socket & A25 & 25/32"12 Point Socket \\
\hline A18 & 9/16"12 Point Socket & A26 & 13/16" 12 Point Socket \\
\hline A19 & 19/32" 12 Point Socket & A28 & 15/16" \({ }^{\prime \prime} 12\) Point Socket \\
\hline A20 & 5/8" 12 Point Socket & A32 & \(1^{\prime \prime} 12\) Point Socket \\
\hline A22 & 11/16" 12 Point Socket & A701 & Reversible Ratchet, \(10^{\prime \prime}\) \\
\hline
\end{tabular}

AA18B - This set consists of 12 point sockets from \(7 / 16^{\prime \prime}\) opening through \(1^{\prime \prime}\) opening plus reversible ratchet \(10^{\prime \prime}\) long. Packed in metal box MB40. 11 PIECES, SHIPPING WEIGHT 23.313 LBS.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[b]{2}{*}{Part No.} & \multirow[b]{2}{*}{Description} & Part No. & . Description \\
\hline & & \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { AH24 } \\
& \text { AH26 }
\end{aligned}
\]} & \multirow[t]{2}{*}{3/4" 6 Point Socket 13/16" 6 Point Socket} \\
\hline AH14 & 7/16" 6 Point Socket & & \\
\hline AH16 & 1/2" 6 Point Socket & AH28 & 7/8" 6 Point Socket \\
\hline AH18 & 9/16" 6 Point Socket & A H30 & 15/16" 6 Point Socket \\
\hline AH20 & 5/8" 6 Point Socket & AH32 & 1" 6 Point Socket \\
\hline AH22 & 11/16" 6 Point Socket & A701 & Reversible Ratchet, 10 " \\
\hline
\end{tabular}

AA20B - This set consists of a complete range of \(1 / 2^{\prime \prime}\) square drive 12 point sockets and hinge handles. Packed in metal box MB40. 17 PIECES, SHIPPING WEIGHT 7.750 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & \multirow[b]{2}{*}{Part No.} & \multirow[b]{2}{*}{Description} \\
\hline A14 & 7/16" 12 Point Socket & & \\
\hline A16 & 1/2" 12 Point Socket & A28 & 7/8" 12 Point Socket \\
\hline A18 & 9/16" 12 Point Socket & A30 & 15/16"12 Point Socket \\
\hline A19 & 19/32" 12 Point Socket & A32 & \(1^{\prime \prime} 12\) Point Socket \\
\hline A20 & 5/8"12 Point Socket & A34 & 1-1/16" 12 Point Socket \\
\hline A22 & 11/16" 12 Point Socket & A36 & 1-1/8" 12 Point Socket \\
\hline A24 & 3/4" 12 Point Socket & A40 & 1-1/4" 12 Point Socket \\
\hline A25 & 25/32"12 Point Socket & A722 & Hinge Handle, 15" \\
\hline A26 & 13/32" 12 Point Socket & A775 & Cross Handle, \(8^{\prime \prime}\) \\
\hline
\end{tabular}

AA24B - Here is a popular set consisting of the necessary 12 point sockets in addition to Universal joint, extensions, speeder handle, and reversible ratchet. Packed in metal box MB56. 16 PIECES, SHIPPING WEIGH'T 12.438 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline A14 & 7/16" 12 Point Socket & A26 & 13/16" 12 Point Socket \\
\hline A16 & 1/2" 12 Point Socket & A28 & 7/8" 12 Point Socket \\
\hline A18 & 9/16" 12 Point Socket & A740 & Speeder, 14" \\
\hline A19 & 19/32"12 Point Socket & A730 & Sliding "T" Handle, 11" \\
\hline A20 & \(5 / 8^{\prime \prime} 12\) Point Socket & A605 & Extension, 5" \\
\hline A22 & 11/16"12 Point Socket & A610 & Extension, 10" \\
\hline A24 & 3/4" 12 Point Socket & A760 & Universal Joint \\
\hline A25 & 25/32"12 Point Socket & A701 & Reversible Ratchet \\
\hline
\end{tabular}

\section*{AA20B}

Width 18-3/8"
Depth 2-3/4"
Height 1-7/8"

AA28B - This set is much the same as AA24B with the addition of an extra speeder handle. Packed in metal box MB56. 21 PIECES, SHIPPING WEIGHT 16.188 LBS.



AM28B - This set contains most of the popular \(1 / 4^{\prime \prime}, 3 / 8^{\prime \prime}\), and \(1 / 2^{\prime \prime}\) square drive sockets and attachments in addition to open end wrenches and 15 degree angle box wrenches. Packed in metal box MB60. 50 PIECES, SHIPPING WEIGHT 16.188 LBS.

\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline V10 & 5/16" 12 Point Socket & A30 & 15/16" 12 Point Socket \\
\hline V11 & 11/32" 12 Point Socket & A32 & 1" 12 Point Socket \\
\hline V12 & 3/8" 12 Point Socket & LD20 & 5/8" Extra Deep Socket, \\
\hline V14 & 7/16" 12 Point Socket & & 3-1/4" Long \\
\hline V730 & Sliding "T" Handle, 4-1/2" & LD22 & 11/16" Extra Deep Socket, \\
\hline V606 & Extension, \(6^{\prime \prime}\) & & 3-1/4" Long \\
\hline T12 & 3/8" 12 Point Socket & LD26T & 13/16" Extra Deep Socket, 3-1/4" Long \\
\hline T14 & 7/16" 12 Point Socket & LD28T & \\
\hline T16 & 1/2"12 Point Socket & LD28 & \(7 / 8\) Extra Deep Socket, 3-1/4" Long \\
\hline T18 & 9/16" 12 Point Socket & A605 & Extension, \(5^{\prime \prime}\) \\
\hline T20 & 5/8"12 Point Socket & A610 & Extension, 10" \\
\hline T22 & 11/16" 12 Point Socket & A775 & Cross Handle, 8" \\
\hline T24 & 3/4" 12 Point Socket & A722 & Hinge Handle, 15" \\
\hline T606 & Extension, \(6^{\prime \prime}\) & A701 & Reversibie Ratchet, \(10{ }^{\prime \prime}\) \\
\hline T612 & Extension, 12"
Hinge Handle, \(8^{\prime \prime}\) & & Open End St. Wrench \\
\hline T775 & Cross Handle, \(6^{\prime \prime}\) & E1214 & \(3 / 8^{\prime \prime}\) \& 7/16" \\
\hline T701 & Reversible Ratchet, \({ }^{\prime \prime}\) & E1618 & \(1 / 2^{\prime \prime} \& 9 / 16^{\prime \prime}\) \\
\hline A14 & 7/16" 12 Point Socket & E2022 & \(5 / 8^{\prime \prime}\) \& 11/16" \\
\hline A16 & 1/2" 12 Point Socket & E1925 & 19/32" \& 25/32" \\
\hline A18 & 9/16" 12 Point Socket & E2426 & \(3 / 4^{\prime \prime}\) \& \(13 / 16^{\prime \prime}\) \\
\hline A19 & 19/32"12 Point Socket & E2830 & \(7 / 8^{\prime \prime} \& 15 / 16^{\prime \prime}\) \\
\hline A20 & 5/8" 12 Point Socket & & \(15^{\circ}\) Angle Box Wrench \\
\hline A22 & 11/16"12 Point Socket & 2890 & \(3 / 8^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) \\
\hline A24 & 3/4" 12 Point Socket & 2891 & \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime}\) \\
\hline A25 & 25/32" 12 Point Socket & 2892 & \(5 / 8^{\prime \prime}\) \& \(11 / 16^{\prime \prime}\) \\
\hline A26 & 13/16" 12 Point Socket & 2893 & \(3 / 4^{\prime \prime}\) \& \(13 / 16^{\prime \prime}\) \\
\hline A28 & 7/8" 12 Point Socket & 2894 & \(7 / 8^{\prime \prime}\) \& \(15 / 16^{\prime \prime}\) \\
\hline
\end{tabular}

Width 21-7/8"
Depth 9-1/4"
Height 5"

Bonney tool sets are especially designed to cover specific types of jobs with all of the tools necessary to complete these jobs. In most cases, the sets are basic and can be added to to round out any particular drive size. Any information not covered in this section can be secured by writing to Bonney Forge \& Tool Works in Alliance, Ohio. Special tools are an outstanding feature with Bonney.

AM36B - This set is designed as a mechanic's main tool set, consisting of popular sockets and attachments in \(1 / 2^{\prime \prime}\) drive, plus open end wrenches, combination wrenches, chisels, punches, pliers, box wrenches, screwdrivers, hack saw, and hammers. Packed in metal box MB76. 72 PIECES, SHIPPING WEIGHT 68.500 LBS.

\section*{AM36B}

Width 23-1/8" Depth 11-1/8" Height 10-3/4"

Part No.
A14 \(7 / 16^{\prime \prime} 12\) Point Socket
A16 \(\quad 1 / 2^{\prime \prime} 12\) Point Socket
A18 \(9 / 16^{\prime \prime} 12\) Point Socket
A19 19/32" 12 Point Socket
A20 \(5 / 8^{\prime \prime} 12\) Point Socket
A22 \(11 / 16^{\prime \prime} 12\) Point Socket
A24
A25
A26
A28
A30
A32 1" 12 Point Socket
LD22 \(11 / 16^{\prime \prime}\) Ex. Deep Socket, 12 Pt.
LD26T 13/16" Ex. Deep Socket, 12 Pt.
LD28T \(7 / 8^{\prime \prime}\) Ex. Deep Socket, 12 Pt .
AS16 \(1 / 2^{\prime \prime} 8\) Point Socket
AS18 \(9 / 16^{\prime \prime} 8\) Point Socket
\(25915 / 16^{\prime \prime}-3 / 4^{\prime \prime}\) Stud Wrench
A785 15/16" Drag Link Socket
A740 Speeder, 14"
A730 Sliding "T" Handle, 11"
A605 Extension, 5"
A610 Extension, 10"
A775 Cross Handle, \(8^{\prime \prime}\)
A760 Universal Joint
A722 Hinge Handle
A701 Reversible Ratchet, \(10^{\prime \prime}\)
\(11617 / 16^{\prime \prime} 12\) Point Comb. Wrench
\(11621 / 2^{\prime \prime} 12\) Point Comb. Wrench
\(11639 / 16^{\prime \prime} 12\) Point Comb. Wrench
\(11645 / 8^{\prime \prime} 12\) Point Comb. Wrench
\begin{tabular}{|c|c|}
\hline Part No. & Description \\
\hline & Open End Straight Wrench \\
\hline E1214 & \(3 / 8^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) \\
\hline E1618 & \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime}\) \\
\hline E2022 & 5/8" \& 11/16" \\
\hline E1925 & 19/32 \({ }^{\prime \prime}\) \& \(25 / 32^{\prime \prime}\) \\
\hline E2426 & \(3 / 4^{\prime \prime}\) \& \(13 / 16^{\prime \prime}\) \\
\hline E2830 & \(7 / 8^{\prime \prime}\) \& \(15 / 16^{\prime \prime}\) \\
\hline & Tappet Wrench \\
\hline 422 & \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime} 2\) each \\
\hline 424 & 5/8" \& 11/16" 2 each \\
\hline & 12 Point Box Wrench \\
\hline 2804L & \(3 / 8^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) \\
\hline 2805L & \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime}\) \\
\hline 2807A & \(5 / 8^{\prime \prime} \& 11 / 16^{\prime \prime}\) \\
\hline 2808 & \(3 / 4^{\prime \prime}\) \& \(7 / 8^{\prime \prime}\) \\
\hline 2810 & 15/16" \& 1" \\
\hline C2 & Blade Chisel, \(7 / 16^{\prime \prime}\) Cut \\
\hline C4 & Blade Chisel, 3/4" Cut \\
\hline C6 & Blade Chisel, 1" Cut \\
\hline C12 & Blade Cape Chisel, 1/4" Cut \\
\hline C15 & Blade Diamond Chisel, 1/4" Cut \\
\hline C21 & Pt. Solid Punch, \(1 / 16^{\prime \prime}\) Point \\
\hline C23 & Solid Punch, \(1 / 8^{\prime \prime}\) Point \\
\hline C25 & Taper Punch, 5/32" Point \\
\hline C28 & Pin Punch, \(1 / 8^{\prime \prime}\) Point \\
\hline C30 & Pin Punch, 1/4" Point \\
\hline C34 & Center Punch \\
\hline C38 & Pinch Bar, 16" \\
\hline 001-2 & Screwdriver, 2" Blade \\
\hline E03 & Bl. Neon Screwdriver, \(3^{\prime \prime}\) Blade \\
\hline S01 & Bl. Adj. Screwdriver, 1-3/4" Bl. \\
\hline S04 & Bl. Adj. Screwdriver, 4" Blade \\
\hline 06 & Screwdriver, 6" Blade \\
\hline 08 & Screwdriver, 8" Blade \\
\hline 006 & Screwdriver, 6" Blade \\
\hline CP2 & Phillips Screwdriver, Screws 5-9 \\
\hline PH2 & Ball Pein Hammer, 2 oz . \\
\hline PH7 & Ball Pein Hammer, 16 oz . \\
\hline B45 & Rib Joint Plier \\
\hline B35 & Ignition Plier \\
\hline 2628 & Hack Saw \\
\hline K54 & Standard Feeler Gauge \\
\hline
\end{tabular}

AM44B - This set also designed as a mechanic's main tool set, much like the AM36B, but not including screwdrivers, pliers, hack saw, hammers, chisels, and punches. A complete set offering \(3 / 8^{\prime \prime}, 1 / 2^{\prime \prime}\), and \(3 / 4^{\prime \prime}\) square drive sockets and attachments. Packed in metal box MB76. 70 PIECES, SHIPPING WEIGHT 75.500 LBS.


\section*{TOOL SET AM48 1/4-3/8-1/2-3/4 INCH SQUARE DRIVE BONANEGY}


AM48B
Width 23-1/8"
Depth 11-1/8"
Height 10-3/4"
\begin{tabular}{|c|c|}
\hline T12 & 3/8" 12 Point Socket \\
\hline T14 & 7/16" 12 Point Socket \\
\hline T16 & 1/2" 12 Point Socket \\
\hline T18 & 9/16" 12 Point Socket \\
\hline T20 & 5/8" 12 Point Socket \\
\hline T22 & 11/16" 12 Point Socket \\
\hline T24 & 3/4" 12 Point Socket \\
\hline T606 & Extension, 6" \\
\hline T612 & Extension, 12" \\
\hline T720 & Hinge Handle, 8-1/2" \\
\hline T775 & Cross Handle, 6" \\
\hline T701 & Reversible Ratchet, 7" \\
\hline A14 & 7/16" 12 Point Socket \\
\hline A16 & 1/2" 12 Point Socket \\
\hline A18 & 9/16" 12 Point Socket \\
\hline A19 & 19/32" 12 Point Socket \\
\hline A20 & 5/8" 12 Point Socket \\
\hline A22 & 11/16" 12 Point Socket \\
\hline A24 & 3/4" 12 Point Socket \\
\hline A25 & 25/32" 12 Point Socket \\
\hline A26 & 13/16" 12 Point Socket \\
\hline A28 & 7/8" 12 Point Socket \\
\hline A30 & 15/16" 12 Point Socket \\
\hline A32 & \(1^{\prime \prime} 12\) Point Socket \\
\hline LD20 & 5/8" Extra Deep Socket 3-1/4" Long \\
\hline LD22 & 11/16" Extra Deep Socket 3-1/4" Long \\
\hline LD26T & 13/16" Extra Deep Socket 3-1/4" Long \\
\hline LD28T & 7/8" Extra Deep Socket 3-1/4" Long \\
\hline AS14 & \(7 / 16^{\prime \prime} 8\) Point Socket \\
\hline AS16 & \(1 / 2^{\prime \prime} 8\) Point Socket \\
\hline AS18 & 9/16" 8 Point Socket \\
\hline A744 & Speeder, 20" \\
\hline A605 & Extension, 5" \\
\hline A610 & Extension, 10" \\
\hline A775 & Cross Handle, \(8^{\prime \prime}\) \\
\hline
\end{tabular}

AM48B - This set contains the popular sockets and attachments in \(1 / 4^{\prime \prime}, 3 / 8^{\prime \prime}, 1 / 2^{\prime \prime}\), and \(3 / 4^{\prime \prime}\) square drive plus open end and box end wrenches. This is an ideal set for the mechanic who wants to begin with a range of drive ends which can be added to as needed. Packed in metal box MB76. 84 PIECES, SHIPPING WEIGHT 79.500 LBS.
Part No.

A722 Hinge Handle, \(15^{\prime \prime}\)
A701 Reversible Ratchet, \(10^{\prime \prime}\)
R34 1-1/16" 12 Point Socket
R36 1-1/8" 12 Point Socket
R40 1-1/4" 12 Point Socket
R42 1-5/16" 12 Point Socket
R46 1-7/16" 12 Point Socket
R48 1-1/2" 12 Point Socket
R701
R730
R609
H10
H12
H14
H16
H18
422
424
426
E1214
E1618
E2022
E1925
E2426
E2830
2890
2891
2892
2893
2894
2895C
2591
V Line
V6
V7
V8
V9
V10
V11
V12
V14
V730
V606
V602
V720
V775
Reversible Ratchet, \(20^{\prime \prime}\)
Sliding " T " Handle, 20 "
Extension, 8-1/2"
Open End Miniature Wrench
    \(3 / 16^{\prime \prime} \& 7 / 32^{\prime \prime}\)
        \(1 / 4^{\prime \prime} \& 9 / 32^{\prime \prime}\)
        \(5 / 16^{\prime \prime}\) \& \(11 / 32^{\prime \prime}\)
        \(3 / 8^{\prime \prime} \& 7 / 16^{\prime \prime}\)
        \(13 / 32^{\prime \prime}\) \& \(15 / 32^{\prime \prime}\)
    Tappet Wrench, \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime} 2\) each
    Tappet Wrench, \(5 / 8^{\prime \prime} \& 11 / 16^{\prime \prime} 2\) each
    Tappet Wrench, \(3 / 4^{\prime \prime} \&{ }^{\circ} 7 / 8^{\prime \prime} 2\) each
    Open End Streamlined Wrench
        \(3 / 8^{\prime \prime} \& 7 / 16^{\prime \prime}\)
        \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime}\)
        \(5 / 8^{\prime \prime} \& 11 / 16^{\prime \prime}\)
        \(19 / 32^{\prime \prime} \& 25 / 32^{\prime \prime}\)
            \(3 / 4^{\prime \prime} \& 13 / 32^{\prime \prime}\)
            \(7 / 8^{\prime \prime} \& 15 / 16^{\prime \prime}\)
        \(15^{\circ}\) Angle Box Wrench
        \(3 / 8^{\prime \prime} \& \quad 7 / 16^{\prime \prime}\)
        \(1 / 2^{\prime \prime} \& \quad 9 / 16^{\prime \prime}\)
        \(5 / 8^{\prime \prime}\) \& \(11 / 16^{\prime \prime}\)
        \(3 / 4^{\prime \prime}\) \& \(13 / 16^{\prime \prime}\)
        \(7 / 8^{\prime \prime}\) \& \(15 / 16^{\prime \prime}\)
        \(1^{\prime \prime} \& 1-1 / 8^{\prime \prime}\)
        Stud Wrench
        Sub-Assembly Set
        \(3 / 16^{\prime \prime} 12\) Point Socket
        7/32" 12 Point Socket
        1/4" 12 Point Socket
        9/32" 12 Point Socket
        5/16" 12 Point Socket
    11/32" 12 Point Socket
        3/8" 12 Point Socket
        7/16" 12 Point Socket
    Sliding "T" Handle, 4-1/2"
    Extension, 6"
    Extension, \(2^{\prime \prime}\)
    Hinge Handle, 5-3/4"
    Cross Handle, \(3-1 / 2^{\prime \prime}\)

AM60B - This is the most complete assortment of tools in a Bonney set comprising \(1 / 4^{\prime \prime}, 3 / 8^{\prime \prime}, 1 / 2^{\prime \prime}\), and \(3 / 4^{\prime \prime}\) square drive sockets and attachments. Packed in metal box MB82. 143 PIECES, SHIPPING WEIGHT 135.000 LBS.

\begin{tabular}{lr}
\hline Part No. & \multicolumn{1}{c}{ Description } \\
\hline T12 & \(3 / 8^{\prime \prime} 12\) Point Socket \\
T14 & \(7 / 16^{\prime \prime}\) 12 Point Socket \\
T16 & \(1 / 2^{\prime \prime}\) 12 Point Socket \\
T18 & \(9 / 16^{\prime \prime} 12\) Point Socket \\
T20 & \(5 / 8^{\prime \prime} 12\) Point Socket \\
T22 & \(11 / 16^{\prime \prime} 12\) Point Socket \\
T24 & 3/4 12 Point Socket \\
T27 & Drag Link Socket \\
T760 & Universal Joint \\
T606 & Extension, \(6^{\prime \prime}\) \\
T612 & Extension, 12" \\
T742 & Speeder, 17-1/2" \\
T720 & Hinge Handle, 8-1/2" \\
T603 & Extension, 3" \\
T775 & Cross Handle, \(6^{\prime \prime}\) \\
T701 & Reversible Ratchet, \(7^{\prime \prime}\)
\end{tabular}
\(|\)\begin{tabular}{lll} 
Part No. & Description \\
\hline R42 & \(1-5 / 16^{\prime \prime}\) & 12 Point Socket \\
R46 & \(1-7 / 16^{\prime \prime}\) & 12 Point Socket \\
R48 & \(1-1 / 2^{\prime \prime}\) & 12 Point Socket \\
R52 & \(1-5 / 8^{\prime \prime}\) & 12 Point Socket \\
R54 & \(1-11 / 16^{\prime \prime} 12\) Point Socket \\
R58 & \(1-13 / 16^{\prime \prime}\) & 12 Point Socket \\
R704 & Reversible Ratchet, 20" \\
R730 & Sliding "T" Handle, 20" \\
R609 & Extension, 8-1/ \(2^{\prime \prime}\)
\end{tabular}
426 (2) Tappet Wrench, \(3 / 4^{\prime \prime}\) \& \(7 / 8^{\prime \prime}\)
B29 7" Thin Nose, Slip Joint, Side
            Cutting Plier

B310
B17
B23
B45
B35
PH2
PH7
PH10
PH20
C2
C4
C6
C21

\section*{AM60B Cont'd.}
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline C26 & Taper Punch, 3/16" Point & 2591 & Stud Wrench, \(5 / 16^{\prime \prime}\) to \(3 / 4^{\prime \prime}\) \\
\hline C28 & Point Pin Punch, \(1 / 8^{\prime \prime}\) Point & 2881 & Starter Wrench \\
\hline C29 & Pin Punch, 3/16" Point & K8 & 8" Holding Tool \\
\hline C34 & Center Punch & K52 & Ignition Feeler Tool \\
\hline C36 & Rivet Buster, 5/8" Cut & K53 & Univ. Mast. Feeler Gauge \\
\hline C38 & Pinch Bar, \(16^{\prime \prime}\) Long & 2628 & Hack Saw (Adjustable) \\
\hline 001-2 & Screwdriver, \(2^{\prime \prime}\) Blade & V6 & 3/16"12 Point Socket \\
\hline CP2 & Phillips Screwdriver & V7 & 7/32" 12 Point Socket \\
\hline 006 & Screwdriver, 6" Blade & V8 & 1/4" 12 Point Socket \\
\hline 0010 & Screwdriver, 10" Blade & V9 & 9/32" 12 Point Socket \\
\hline E03 & Bl. Neon Screwdriver & V10 & 5/16"12 Point Socket \\
\hline & B1. Adjusting Screwdriver & V11 & 11/32"12 Point Socket \\
\hline S01 & 1-3/4" Blade & V12 & 3/8" 12 Point Socket \\
\hline S04 & 4" Blade & V14 & 7/16" 12 Point Socket \\
\hline 06 & Screwdriver, Round Shank, & VS8 & 1/4" \({ }^{\prime \prime} 8\) Point Socket \\
\hline & \(6{ }^{\prime \prime}\) Blade & VS10 & 5/16" 8 Point Socket \\
\hline 08 & Screwdriver, Square Shank, \(8^{\prime \prime}\) Blade & \[
\begin{aligned}
& \text { VS12 } \\
& \text { V730 }
\end{aligned}
\] & \begin{tabular}{l}
\(3 / 8^{\prime \prime} 8\) Point Socket \\
Sliding " T " Handle, 4-1/2"
\end{tabular} \\
\hline S012 & Bl. Adjusting Screwdriver, \(12^{\prime \prime}\) & V606 & Extension, \(6^{\prime \prime}\) \\
\hline & Blade (Square Shank) & V602 & Extension, \({ }^{\prime \prime}\) \\
\hline
\end{tabular}
TOOL SETS 3/4 INCH SQUARE DRIVE


\section*{TOOL SETS I INCH SQUARE DRIVE}

XH1B - This set includes a complete line of the \(1^{\prime \prime}\) drive sockets plus the new design Bonney \(1^{\prime \prime}\) drive ratchet for extra heavy duty work. Packed in metal box MB64.8 PIECES, SHIPPING WEIGHT
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{XH1B} & Part No. & Description & Part No. & Description \\
\hline & X46 & 1-7/16 \({ }^{\prime \prime}\) Socket & X64 & \(2^{\prime \prime}\) Socket \\
\hline 1/2-3/4 INCH & X48 & 1-1/2" \({ }^{\prime \prime}\) Socket & X70 & 2-3/16" Socket \\
\hline SQUARE DRIVE & X X 5 & 1-5/8" Socket & X76 & 2-3/8" Socket \\
\hline Width 21-7/8" & X58 & 1-13/16" Socket & X701 & Ratchet, 20 " \\
\hline
\end{tabular}

\section*{Depth 9-1/4"} Height 5"

CL - Consists of one each of 5 size clutch head screwdriver blades ranging from \(1-5 / 8^{\prime \prime}\) to \(6^{\prime \prime}\). This set is packaged in a cardboard container. 5 PIECES, SHIPPING WEIGHT 1.500 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline CL3 & Cl. Hd. 4" Screwdriver, Bit Clutch Size \(5 / 32^{\prime \prime}\) & CL13 & Cl. Hd. 1-5/8" Screwdriver, Bit Clutch Size \(5 / 32^{\prime \prime}\) \\
\hline CL5 & Cl. Hd. 6" Screwdriver, Bit Clutch Size 1/4" & CL15 & Cl. Hd. 1-5/8" Screwdriver, Bit Clutch Size 1/4" \\
\hline CL7 & Cl. Hd. 6" Screwdriver, Clutch Size 5/16" & & \\
\hline
\end{tabular}

CP - This set will answer all requirements for screwdrivers to fit Phillips screws. The molding, hinges, and interior chrome trim are usually fastened with Phillips screws. This set includes 4 screwdrivers ranging in blade length from \(3^{\prime \prime}\) to \(8^{\prime \prime}\). Packed in cardboard box. 4 PIECES, SHIPPING WEIGHT 1.250 LBS.
\begin{tabular}{ll|ll}
\hline Part & & \\
No. & Description & \begin{tabular}{l} 
Part \\
No.
\end{tabular} & Description \\
CP1 & 3" & Blade Phillips Screwdriver & \\
CP3 & 6" & Blade Phillips Screwdriver \\
CP2 & 4" & Blade Phillips Screwdriver & CP4 \\
8" & Blade Phillips Screwdriver
\end{tabular}

WP - This set includes one each of the WP series wood handle screwdrivers ranging in blade length from \(3^{\prime \prime}\) to \(8^{\prime \prime}\). Packed in cardboard box. 4 PIECES, SHIPPING WEIGHT 1.313 LBS.


W05 - This set consists of 5 wood handle screwdrivers ranging in blade length from \(3^{\prime \prime}\) to \(10^{\prime \prime}\). Packed in cardboard box. 5 PIECES, SHIPPING WEIGHT 2.250 LBS.
\begin{tabular}{cc|cc}
\hline Part No. & Description & Part No. & Description \\
\cline { 1 - 4 } WO3 & \(3^{\prime \prime}\) & Blade Screwdriver & WO8 \\
WO4 & \(8^{\prime \prime}\) & Blade Screwdriver \\
Wlade Screwdriver & WO10 & \(10^{\prime \prime}\) & Rlade Screwdriver \\
W06 & \(6^{\prime \prime}\) Blade Screwdriver & & \\
\hline
\end{tabular}

0672 - This set consists of 3 offset screwdrivers which permit adjustments where standard screwdrivers are too large. These tools are available separately or packaged in cardboard box. Lengths of these screwdrivers vary from \(4-7 / 8^{\prime \prime}\) to \(5-7 / 8^{\prime \prime}\). 3 PIECES, SHIPPING WEIGHT .470 LBS.
\begin{tabular}{lc|ll}
\hline \begin{tabular}{l} 
Part \\
No.
\end{tabular} & Description & \begin{tabular}{l} 
Part \\
No.
\end{tabular} & Description \\
\cline { 1 - 4 } & & \\
\hline
\end{tabular}

N5R - This set consists of 11 popular size hexagonal keys packaged in plastic envelope. These sets are sold in dozen lots. 11 PIECES IN PLASTIC ROLL LR5. PER SET, SHIPPING WEIGHT . 625 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline & Hexagonal Key & AW5 & 5/32" Across Flats \\
\hline AW1 & 050" Across Flats & AW6 & 3/16" Across Flats \\
\hline AW2 & 1/16" Across Flats & AW7 & 7/32" Across Flats \\
\hline AW2-1/2 & 5/64" Across Flats & AW8 & 1/4" Across Flats \\
\hline AW3 & 3/32" Across Flats & AW10 & 5/16" Across Flats \\
\hline AW4 & 1/8" Across Flats & AW12 & 3/8" Across Flats \\
\hline
\end{tabular}

N8 - This set includes all the necessary tools for the proper camber-caster adjustments. Packed in cardboard container. 9 PIECES, SHIPPING WEIGHT . 595 LBS.


N11R - This set is designed for ignition service.
Contains 6 small open end wrenches especially designed for this type of work. Also includes necessary feeler gauge, ignition plier, point file, small adjustable wrench, and neon tube screwdriver. Packed in plastic roll LR36. 10 PIECES, SHIPPING WEIGHT . 625 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline & Electric Wrench & & Electric Wrench \\
\hline & \(15^{\circ}\) End \(60^{\circ}\) End & E24 & \(5 / 16^{\prime \prime}\) \& \(9 / 32^{\prime \prime}\) \\
\hline E14 & 13/64" \& 15/64" & BW4 & Adjust. End Wrench, 4" \\
\hline E16 & 15/64" \& 13/64" & 5-3/8" & Point File \\
\hline E18 & \(7 / 32^{\prime \prime}\) \& \(1 / 4^{\prime \prime}\) & E02 & Bl. Neon Screwdriver \\
\hline E20 & \(1 / 4^{\prime \prime}\) \& \(7 / 32^{\prime \prime}\) & K52 & Ignition Feeler Gauge \\
\hline E22 & 9/32" \& 5/16" & B35 & Ignition Plier \\
\hline
\end{tabular}


N13R - The tools contained in this set are especially designed to handle all types of ignition repair and adjustment plus many adjustments on electrical system. Each wrench is especially designed for its particular application. Packed in plastic roll LR36. 10 PIECES, SHIPPING WEIGHT .625 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline & Ignition Wrench & E7 & 15/64" \& 17/64" \\
\hline E2 & \(1 / 4^{\prime \prime}\) \& \(1 / 4^{\prime \prime}\) & E8 & \(7 / 32^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) \\
\hline E4 & \(17 / 64^{\prime \prime}-9 / 32^{\prime \prime}-11 / 32^{\prime \prime}\)
\(5 / 16^{\prime \prime}\) & E9 & \(1 / 2^{\prime \prime}\) \\
\hline E5 & \(5 / 16^{\prime \prime}\) & E10 & \(3 / 8^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) \\
\hline E6 & \(5 / 16^{\prime \prime}\) & E11 & 15/64" \& 9/32" \\
\hline
\end{tabular}

N20R - This set includes 5 miniature wrenches designed especially for perfect fit on small applications. Tiny in size, but built for strength and durability. Packed in plastic roll LR24. 5 PIECES, SHIPPING WEIGHT . 313 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline & O. E. Miniature Wrench & H14 & \(5 / 16^{\prime \prime}\) \& 11/32" \\
\hline H10 & \(3 / 16^{\prime \prime}\) \& \(7 / 32^{\prime \prime}\) & H16 & \(3 / 8^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) \\
\hline H12 & \(1 / 4^{\prime \prime}\) \& \(9 / 32^{\prime \prime}\) & H18 & 13/32" \& 15/32" \\
\hline
\end{tabular}


N24R - This set includes 9 open end wrenches designed for adjustments on electrical system and ignition repair. Packed in plastic roll LR28.
 9 PIECES, SHIPPING WEIGHT . 469 LBS.
\begin{tabular}{lc|ccc}
\hline Part No. & Description & Part No. & Description \\
& Electric Wrench & E22 & \(9 / 32^{\prime \prime} \& 5 / 16^{\prime \prime}\) \\
E14 & \(13 / 64^{\prime \prime} \& 15 / 64^{\prime \prime}\) & E24 & \(5 / 16^{\prime \prime} \& 9 / 32^{\prime \prime}\) \\
E16 & \(15 / 64^{\prime \prime} \& 13 / 64^{\prime \prime}\) & E26 & \(11 / 32^{\prime \prime} \&\) & \(3 / 8^{\prime \prime}\) \\
E18 & \(7 / 32^{\prime \prime} \& \& 1 / 4^{\prime \prime}\) & E28 & \(3 / 8^{\prime \prime} \& 11 / 32^{\prime \prime}\) \\
E20 & \(1 / 4^{\prime \prime} \& 7 / 32^{\prime \prime}\) & E30 & \(7 / 16^{\prime \prime} \&\) & \(1 / 2^{\prime \prime}\) \\
\hline
\end{tabular}

N45R - This set contains 6 open end wrenches in popular sizes from \(1 / 4^{\prime \prime}\) to \(15 / 16^{\prime \prime}\) openings. Packed in plastic roll LR56. 6 PIECES, SHIPPING WEIGHT 1.843 LBS.
\begin{tabular}{lc|ccc}
\hline Part No. & \multicolumn{2}{c}{ Description } & Part No. & Description \\
& Open End Str. Wrench & E2022 & \(5 / 8^{\prime \prime} \& 11 / 16^{\prime \prime}\) \\
E810 & \(1 / 4^{\prime \prime} \&\) & \(5 / 16^{\prime \prime}\) & E2426 & \(3 / 4^{\prime \prime} \& 13 / 16^{\prime \prime}\) \\
E1214 & \(3 / 8^{\prime \prime} \& 5 / 16^{\prime \prime}\) & E2830 & \(7 / 8^{\prime \prime} \& 15 / 16^{\prime \prime}\) \\
E1618 & \(1 / 2^{\prime \prime} \& ~\) & \(9 / 16^{\prime \prime}\) & & \\
\hline
\end{tabular}

N46R - This set contains 6 streamlined Bonney wrenches, openings ranging from \(5 / 16^{\prime \prime}\) to \(1^{\prime \prime}\). Packed in plastic roll LR56. 6 PIECES, SHIPPING WEIGHT 2.313 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline & Open End Str. Wrench & 224 &  \\
\hline E1012
E1416 & \(\begin{array}{lll}5 / 16^{\prime \prime} & \& & 3 / 8^{\prime \prime} \\ 7 / 16^{\prime \prime} & \& & 1 / 2^{\prime \prime}\end{array}\) & E2628 & 13/16" \& \& \({ }^{\prime \prime}{ }^{\prime \prime}{ }^{7 / 8^{\prime \prime}}\) \\
\hline
\end{tabular}


E1820
\(9 / 16^{\prime \prime} \& 5 / 8^{\prime \prime}\)
N46R

N56R - This set includes 5 standard combination wrenches representing the popular openings from \(7 / 16^{\prime \prime}\) to \(11 / 16^{\prime \prime}\). Packed in plastic roll LR72. 5 PIECES, SHIPPING WEIGHT 1.250 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline & 12 Point Comb. Wrench & 1163 & 9/16" \\
\hline 1161 & 7/16"' & 1164 & 5/8" \\
\hline 1162 & \(1 / 2^{\prime \prime}\) & 1165 & 11/16" \\
\hline
\end{tabular}

N60R - This set is made up of 5 combination wrenches in 12 point box end and ranging in openings from \(7 / 16^{\prime \prime}\) to \(11 / 16^{\prime \prime}\). Packed in plastic roll LR72. 5 PIECES, SHIPPING WEIGHT 1.563 LBS.
\begin{tabular}{ll|ll}
\hline Part No. & \multicolumn{1}{c}{ Description } & Part No. & Description \\
\hline \multirow{3}{*}{12 Point Comb. Wrench } & 118 & \(9 / 16^{\prime \prime}\) \\
1114 & \(7 / 16^{\prime \prime}\) & 1120 & \(5 / 8^{\prime \prime}\) \\
1116 & \(1 / 2^{\prime \prime}\) & 1122 & \(11 / 16^{\prime \prime}\) \\
\hline
\end{tabular}

N61R - This set is made up of 5 combination wrenches in the popular 6 point box end ranging in openings from \(7 / 16^{\prime \prime}\) to \(11 / 16^{\prime \prime}\). Packed in plastic roll LR72. 5 PIECES, SHIPPING WEIGHT 1.532 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & . Description \\
\hline 1114H & \(7 / 16^{\prime \prime} 6 \mathrm{Pt}\). Comb. Wrench & 1120H & 5/8" 6 Pt. Comb. Wrench \\
\hline 1116 H & \(1 / 2^{\prime \prime} 6 \mathrm{Pt}\). Comb. Wrench & 1122 H & 11/16" 6 Pt. Comb. Wrench \\
\hline 1118H & 9/16" 6 Pt. Comb. Wrench & & \\
\hline
\end{tabular}

N64R - This set is made up of 7 combination wrenches featuring 12 point box end and openings ranging from \(3 / 8^{\prime \prime}\) to \(3 / 4^{\prime \prime}\). Packed in plastic roll LR80. 7 PIECES, SHIPPING WEIGHT . 222 LBS.
\begin{tabular}{cc|cc}
\hline Part No. & \multicolumn{1}{c}{ Description } & Part No. & Description \\
1112 & 12 Point Comb. Wrench & 1120 & 12 Point Comb. Wrench \\
1114 & 12 Point Comb. Wrench & 1122 & 12 Point Comb. Wrench \\
1116 & 12 Point Comb. Wrench & 1124 & 12 Point Comb. Wrench \\
1118 & 12 Point Comb. Wrench & & \\
\hline
\end{tabular}

N65R - This set is composed of 7 combination wrenches with 6 point box end and openings ranging from \(3 / 8^{\prime \prime}\) to \(3 / 4^{\prime \prime}\). Packed in plastic roll LR80. 7 PIECES, SHIPPING WEIGHT . 242 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline 1112H & \(3 / 8^{\prime \prime} 6\) Pt. Comb. Wrench & 1120H & 5/8" 6 Pt. Comb. Wrench \\
\hline 1114H & 7/16" 6 Pt. Comb. Wrench & 1122H & 11/16" 6 Pt. Comb. Wrench \\
\hline 1116H & 1/2" 6 Pt. Comb. Wrench & 1124 H & 3/4" 6 Pt. Comb. Wrench \\
\hline 1118H & 9/16" 6 Pt. Comb. Wrench & & \\
\hline
\end{tabular}

N68R - This set is made up of 8 popular combination wrenches in openings from \(3 / 8^{\prime \prime}\) to \(7 / 8^{\prime \prime}\). Packed in plastic roll LR84. 8 PIECES, SHIPPING WEIGHT . 250 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & \begin{tabular}{l}
Part \\
No.
\end{tabular} & Description \\
\hline 1160 & 3/8"12 Pt. Comb. Wrench & 1164 & \(5 / 8^{\prime \prime} 12\) Pt. Comb. Wrench \\
\hline 1161 & 7/16"12 Pt. Comb. Wrench & 1165 & 11/16"12 Pt. Comb. Wrench \\
\hline 1162 & 1/2"12 Pt. Comb. Wrench & 1166 & \(3 / 4^{\prime \prime} 12 \mathrm{Pt}\). Comb. Wrench \\
\hline 1163 & 9/16"12 Pt. Comb. Wrench & 1167 & 7/8"12 Pt. Comb. Wrench \\
\hline
\end{tabular}

N80R - This set is made up of extra small box end wrenches ideal for repair work on generators, carburetors, starters, and electrical systems where parts are small and limited space available. Packed in plastic roll LR8. 4 PIECES, SHIPPING WEIGHT . 188 LBS.
\begin{tabular}{|c|c|c|c|c|}
\hline Part No. & Description & \begin{tabular}{l}
Part \\
No.
\end{tabular} & Description & \\
\hline & 6 Point Small Box Wrench & & 12 Point Small Box & \\
\hline E40 & 3/16" \& 13/64" & E44 & \(1 / 4^{\prime \prime}\) \& 9/32" & \\
\hline E42 & 7/32" \& 15/64" & E46 & \(5 / 16^{\prime \prime} \& 11 / 32^{\prime \prime}\) & \\
\hline
\end{tabular}

N93R-This set is made up of 5 long type double off-set box wrenches in openings ranging from \(3 / 8^{\prime \prime}\) to \(15 / 16^{\prime \prime}\). Packed in plastic roll LR97. 5 PIECES, SHIPPING WEIGHT . 325 LBS.
\begin{tabular}{|c|c|c|c|c|}
\hline Part No. & Description & Part No. & \multicolumn{2}{|l|}{Description} \\
\hline & 12 Point Box Wrench & 2807A & \(5 / 8^{\prime \prime}\) \& \(11 / 16^{\prime \prime}\) & \\
\hline 2804L & \(3 / 8^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) & 2808 F & \(3 / 4^{\prime \prime}\) \& \(13 / 16^{\prime \prime}\) & \\
\hline 2805L & \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime}\) & 2809 & \(7 / 8^{\prime \prime}\) \& 15/16" & \\
\hline
\end{tabular}

N98R - This set contains 5 long type wrenches in openings ranging from \(3 / 8^{\prime \prime}\) to \(15 / 16^{\prime \prime}\). Packed in plastic roll LR97. 5 PIECES, SHIPPING WEIGHT . 428 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & o. Description & Part No. & Description \\
\hline & 12 Point Angle Box Wrench & 2893 & \(3 / 4^{\prime \prime}\) \& 11/16" \\
\hline 2891 & \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime}\) & 2894 & \(7 / 8^{\prime \prime}\) \& \(15 / 16^{\prime \prime}\) \\
\hline 2892 & \(5 / 8^{\prime \prime} \& 11 / 16^{\prime \prime}\) & 2895 C & \(1^{\prime \prime}\) \& \(1-1 / 8^{\prime \prime}\) \\
\hline
\end{tabular}

C45R - This set includes a good assortment of flat chisels covering most straight cutting operations. Packed in plastic roll LR70. 5 PIECES, SHIPPING WEIGHT 3.500 LBS.
\begin{tabular}{cc|ccc|}
\hline Part No. & \multicolumn{2}{c}{ Description } & & Part No.
\end{tabular}

C46R - This set includes a good assortment of chisels and punches which will cover most applications for the average mechanic. Packed in plastic roll LR96. 13 PIECES, SHIPPING WEIGHT 6.375 LBS.


C46R


RF80B - This kit of refrigeration tools includes most of the sockets and attachments for the man just beginning refrigeration service. Packed in metal box MB16. 20 PIECES, SHIPPING WEIGHT . 206 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No & Description \\
\hline V8 & 1/4" 12 Point Socket & RF4 & Valve Stem Socket \\
\hline V9 & 9/32"12 Point Socket & RF5 & Valve Stem Socket \\
\hline V10 & 5/16"12 Point Socket & RF6 & Packing Nut Socket \\
\hline V11 & 11/32"12 Point Socket & RF16 & Packing Nut Socket \\
\hline V14 & 7/16" 12 Point Socket & RF71 & Packing Nut Socket \\
\hline V730 & Sliding "T" Handle, & RF72 & Packing Nut Socket \\
\hline & 4-1/2" & RF73 & Packing Nut Socket \\
\hline V606 & Extension, 6" & RF67 & Kerotest Socket \\
\hline RF2 & Valve Stem Socket & RF49 & Adapter \\
\hline RF3 & Valve Stem Socket & RF45 & Reversible Ratchet \\
\hline
\end{tabular}


\section*{RF80B}

Width 7-3/4"
RF81B - This set of refrigeration tools is more complete than the smaller RF80B set. Has all the necessary sockets and attachments plus box end wrenches to enable the serviceman to handle most repairs and adjustments. Packed in metal box MB24. 28 PIECES, SHIPPING WEIGHT 1.815 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline V8 & 1/4 12 Point Socket & RF3 & Valve Stem Socket \\
\hline V9 & 9/32 12 Point Socket & RF4 & Valve Stem Socket \\
\hline V10 & 5/16" 12 Point Socket & RF5 & Valve Stem Socket \\
\hline V11 & 11/32 \({ }^{\prime \prime} 12\) Point Socket & RF6 & Packing Nut Socket \\
\hline V12 & 3/8 12 Point Socket & RF16 & Packing Nut Socket \\
\hline V14 & 7/16" 12 Point Socket & RF71 & Packing Nut Socket \\
\hline V730 & Sliding "T" Handle, & \[
\mathrm{RF}_{\mathrm{DF}}
\] & Packing Nut Socket Kerotest Socket \\
\hline V606 & Extension, \(6^{\prime \prime}\) & RF49 & Adapter, \(1 / 4^{\prime \prime} \times 1 / 4^{\prime \prime}\) \\
\hline T606 & Extension, \(6^{\prime \prime}\) & RF41 & Adapter, \(1 / 4^{\prime \prime} \times 3 / 8^{\prime \prime}\) \\
\hline T16 & \(1 / 2^{\prime \prime} 12\) Point Socket & RF45 & Reversible Ratchet \\
\hline T18 & \(9 / 16^{\prime \prime} 12\) Point Socket & & 12 Point Box Wrench \\
\hline T20 & 5/8 \({ }^{\prime \prime} 12\) Point Socket & 2804 & \(3 / 8^{\prime \prime}\) \& \(7 / 16^{\prime \prime}\) \\
\hline T730 & Sliding "T" Handle, 8" & 2805 & \(1 / 2^{\prime \prime}\) \& \(9 / 16^{\prime \prime}\) \\
\hline RF2 & Valve Stem Socket & 2806 C & \(5 / 8^{\prime \prime}\) \& 11/16" \\
\hline
\end{tabular}

RF45 Reversible Ratchet 12 Point Box Wrench \(3 / 8^{\prime \prime} \& 7 / 16^{\prime \prime}\) \(28051 / 2^{\prime \prime} \& 9 / 16^{\prime \prime}\) \(5 / 8^{\prime \prime}\) \& \(11 / 16^{\prime \prime}\)

\section*{RF66 TUBE BENDING SET}

RF66 Tube Bending Set - This complete set of tube benders is a must for the complete tool set. Contains benders for tubing from \(1 / 4^{\prime \prime}\) to \(5 / 8^{\prime \prime}\). Packed in cardboard box. 6 PIECES, SHIPPING WEIGHT . 216 LBS.
\begin{tabular}{|c|c|c|c|}
\hline Part No. & Description & Part No. & Description \\
\hline RF60 & Tube Bender, 10" & RF63 & Tube Bender, \(12^{\prime \prime}\) \\
\hline RF61 & Tube Bender, 10 " & RF64 & Tube Bender, \(12^{\prime \prime}\) \\
\hline RF62 & Tube Bender, 10" & RF65 & Tube Bender, 12 " \\
\hline
\end{tabular}

\section*{27010 "UNIVERSAL"}

\section*{BAND ADJUSTING TOOL}

Band adjustments can be made in 15 minutes with this tool on Hydramatic, Ford-omatic, Merc-o-matic, Dynaflow, Powerflite, and Powerglide.

\section*{27030 FRONT SERVO GAGE}

This tool is used to adjust the front band of the hydramatic transmission. In less than 30 minutes, an experienced mechanic can adjust front and rear bands.

ALIGNMENT PILOT PINS 27510-27520-27530-27540


Proper alignment of bolt holes saves valuable time when installing transmissions.
(TWO EACH PINS)

\section*{27090 HUB RETAINING BRACKET}

Holds rear clutch hub in place, thus assuring proper installation with minimum time and effort.

\section*{27370 GOVERNOR SLEEVE ALIGNER}


Assures proper alignment of governor when assembling the transmission.

\section*{27430 LIFTING TOOL}

Designed basically to enable the mechanic to lift the clutch assembly without danger of injury.

\section*{27020 BAND ADJUSTING GAGE}

Used in conjunction with a TDR50-I Torque Wrench to tighten adjusting screws on Ford-o-matic and Merc-o-matic.

\section*{27040 REAR SERVO GAGE}

\section*{BONNEY}

A Bonney tool used to adjust the rear servo on the hydramatic transmission.

\section*{27190 THROTTLE LINKAGE PINS}

Used to make linkage adjustments and substitute as alignment pins. Takes the "guesswork" out of difficult installation jobs.

\section*{27110 SEAL INSTALLER}

This Bonney tool is designed to protect the reverse piston outer seal when installing the piston in the cylinder.

\section*{27340 PARALLEL JAW PLIER}

The unique design of these pliers enables the jaws to remain parallel when removing snap rings.

\section*{27240 THROTTLE PRESSURE ADJUSTMENT WRENCH}

Used in conjunction with the oil pressure gage (\#27460) for accurate adjustment.

\section*{27380 OIL DELIVERY SLEEVE RING COMPRESSOR}

Prevents breakage of front clutch unit in assembly by compressing the oil seal rings on the oil delivery sleeve.

\section*{27360 MAINSHAFT "END-PLAY" GUIDE}

An essential tool for checking end-play of the transmission.

\section*{27350 REAR UNIT HOLDER}

Prevents rotation of the rear unit when loosening or tightening bolts. Fits over bolt heads and holds unit in place.

\section*{27460 OIL PRESSURE GAGE}

Large easy-to-read, \(3-1 / 2^{\prime \prime}\) dial face for greater accuracy in setting oil pressures on all automatic transmissions.

\section*{27050 CLUTCH SPRING COMPRESSOR 27330 BLOW GUN}


Another "universal" tool used to compress clutch springs in various transmissions.

\section*{27070 DIAL INDICATOR HOLDER}

This one rod takes the place of two featured by some manufacturers. Another Bonney "universal" tool.

\section*{27450 BEARING REMOVER} moving snap rings from Powerglide and Dynaflow transmissions. inch pound).

A really handy tool in overhaul work.

For blowing out small oil passages.

\section*{27550 TORQUE WRENCH EXTENSION}

Used in conjunction with the TDR50-I torque wrench to enable easy adjustment of front band from under car.


This tool fits all models. Used in conjunction with a dial indicator.


Other tools necessary to perform adjustment and repair! Soft face hammer PH20-sockets for drain plugs (TH10 and TH14) plus torque wrenches TDR 50I ( 50 inch pound), TDR 3001 (300

\section*{27080 SLEEVE REMOVER}

Primarily intended for removing the oil delivery sleeve on Ford-o-matic. With the added fitting, the mechanic can also remove the line exhaust valve sleeve on hydramatic transmission.

\section*{TH14 SINGLE HEXAGON BONNEY SOCKET}

With this specially designed six-point socket, drain plugs and aluminum fittings can be removed with little danger of damage.


Without this tool, it is virtually impossible to compress all the springs on the rear servo of the hydramatic transmission.

\section*{27390 "UNIVERSAL" ENGINE SUPPORT FIXTURE}


The small shop will benefit greatly from the use of this fixture, allowing the car to be moved about after the transmission is removed.

\section*{FOR MORE INFORMATION...}

For complete information on any of the tools mentioned, write for catalog ATT which fully explains the operation of each tool.

\section*{AUTOMATIC TRANSMISSION TOOLS}

Illustrated on this page are the four (4) selections of automatic transmission tools offered by Bonney. These assortments allow the mechanic an opportunity to build his set of tools or start with the complete set shown on the large board (27480) below.

Most popular for the average mechanic is the 27600 board which offers the basic tools plus drain plug sockets and two sizes of torque wrenches ( 50 inch pound and 300 inch pound).

The smallest board below (27495) is recommended for the service station or small garage specializing in minor adjustments only. All boards are \(5 / 8\) inch plywood, painted red with hooks furnished.


27495 (12" \(\times 12^{\prime \prime}\) )

\(27600\left(18^{\prime \prime} \times 24^{\prime \prime}\right)\)

\(27490\left(18^{\prime \prime} \times 24^{\prime \prime}\right)\)


\section*{METAL BOXES}

All of these metal boxes are made of strong, heavy gage sheet metal finished in attractive Bonney red "crackle" enamel. All given measurements are outside diameter. All metal boxes are 22 gage cold rolled steel with the exception of MB60 which is 20 gage. The bottom of each box is of a slightly heavier gage for added strength.

\section*{MB8 toal bax}

Featuring a button catch - no dividers.
WIDTH 4-7/8" DEPTH 2-3/8" HEIGHT \(1^{\prime \prime}\) WEIGHT LBS. . 297

\section*{MB12 toal bax}

This box has a button catch and a divider.
WIDTH 6-1/2"
DEPTH 4-13/16"
WEIGHT LBS. . 844
HEIGHT 1-3/16"

\section*{MB16 toal box}

Features a button catch and a divider.
WIDTH 7-3/4" DEPTH 3-3/8" HEIGHT 1-1/16"

\section*{MB24 tad bax}

This box has a button catch and several dividers.
WIDTH 8-5/8" DEPTH 5-15/16" HEIGHT 1-1/4"
WEIGHT LBS. 1.562

\section*{MB36 toal bax}

Features a button catch and a divider.
WIDTH 13"
DEPTH 3"
HEIGHT 1-7/8" WEIGHT LBS. 1.312

\title{
MB40 toal bax \\ Features a trunk catch and contains a divider. WIDTH 18-3/8" DEPTH 2-3/4" HEIGHT 1-7/8" WEIGHT LBS. 2.062 \\ 
}

MB44 toal lax
It has a trunk catch, top carrying handle and contains a divider.

WIDTH 18-1/4"
DEPTH 4-5/8"
HEIGHT 1-5/8"
WEIGHT LBS. 2.719


MB56 toal bax
This box has two (2) trunk catches, side carrying handle and contains a divider.
WIDTH 20-7/16" DEPTH 8-3/8" HEIGHT 2-1/4" WEIGHT LBS. 4.875


\section*{MB60 toal bax}

This box has a padlock hasp, two (2) trunk catches, top carrying handle and has a divided sliding tray \(21-3 / 8^{\prime \prime}\) wide, \(4^{\prime \prime}\) deep and \(15 / 16^{\prime \prime}\) high. (MB60-1) This is the same box as MB64 with (MB60-1) tray. WIDTH 21-7/8" DEPTH 9-1/4" HEIGHT 5" WEIGHT LBS. 10.406

\section*{MB64 tool lax}

Featuring a padlock hasp, two (2) trunk catches and top carrying handle.
\[
\text { WIDTH 21-7/8" DEPTH 9-1/4" HEIGHT } 5^{\prime \prime}
\] WEIGHT LBS. 8.750

\section*{MB68 toal bax}

This box has a padlock hasp, two (2) trunk catches, top carrying handle and contains 2 dividers.
This is the MB64 box with removable MB68-1 and MB68-2 dividers.
WIDTH 21-7/8" DEPTH 9-1/4" HEIGHT 5" WEIGHT LBS. 9.344

Bonney offers a complete line of heavy duty cabinets and chests designed to hold an assortment of tools. All drawers are of reinforced construction to assure long, dependable service. Handles and hasps are chrome plated to add beauty and durability.


\section*{MB82 CHEST}

The top unit is the Bonney Chest (MB82). Six-drawer unit with convenient TOTE TRAY for carrying tools to the job. Special features include reinforced panels with full length burglar-proof piano hinges. Heavy gage metal used throughout. In addition, full length drawers, heavy channel type corners and sliderun drawers are incorporated. Panel folds down over front, locking drawers in place.

\section*{MB80 "GO-BETWEEN"}

This new unit (MB80) is designed especially for insertion between the roller cabinet and either of the chests (with unique locking device to hold both units in place). This gives the mechanic three additional drawers. Heavy duty construction incorporated throughout.

CC15 ROLLER CABINET
The (CC15) Roller Cabinet has all the special features found in other units plus many extras. Top locking feature eliminates stooping for access to lock. Large full swivel casters with rubber tires allow the unit to roll easily under full loads. Side handle shown on other page enables mechanic to pull unit with ease.

On the opposite page, you will see the MB76 Chest, a smaller substitute for the MB82. Has two large drawers plus handy TOTE TRAY. Top folds down over front and locks entire unit. All of the special features such as hinges, slides, etc., found in the other units are incorporated in this Chest.

\section*{- HEAVY GAGE STEEL IN ALL UNITS}

The outstanding feature of all the units on this sheet is the new ACRYLIC FINISH which allows easy cleaning of units and assures longer lasting appearance. Less chance of color fade and collection of grease, oil and other foreign matter.
- TUMBLER LOCKS FOR SECURITY
- PAINTED RED - ACRYLIC FINISH
- EASY GLIDE DRAWER SUSPENSION
- ALL DRAWERS REINFORCED CONSTRUCTION

\section*{MB-76 (2-DRAWER) CHEST}

Width of cabinet-less handles-22-23/32"
Depth of cabinet-10-3/32"
Height of cabinet-10-1/16"
Top drawer-20-1/4" wide-8-7/8" deep- \(2-1 / 2^{\prime \prime}\) high
Bottom drawer-20-1/4" wide-8-7/8" deep-3-7/16" high
Shipping weight-36-1/2 lbs.

\section*{MB-80 (3-DRAWER) CHEST}

Width of cabinet- \(26^{\prime \prime}\)
Height of cabinet-9-1/2"
Depth of cabinet-12"
1 drawer- \(23-7 / 8^{\prime \prime}\) wide- \(10-1 / 2^{\prime \prime}\) deep- \(3-1 / 4^{\prime \prime}\) high
2 drawers each measuring 23-7/8" wide- \(10-1 / 2^{\prime \prime}\) deep-1-3/4" high
Shipping weight- 37 lbs .

\section*{MB-82 (6-DRAWER) CHEST}

Width of cabinet-25-15/16"
Height of cabinet-14-13/32"
Depth of cabinet-12-1/8"
3 drawers each measuring \(7-1 / 4^{\prime \prime}\) wide- \(10-9 / 16^{\prime \prime}\) deep-1-3/4" high
2 drawers each measuring \(23-13 / 16^{\prime \prime}\) wide-10-9/16" deep-1-3/4" high
Bottom drawer-23-13/16" wide-10-9/16" deep-3-3/16" high
Shipping weight-65 lbs.

\section*{CC-15 ROLLER CABINET}

Height-31-3/4"
Width of cabinet less handles- \(26-3 / 8^{\prime \prime}\)
Depth of cabinet less handles- \(18-1 / 4^{\prime \prime}\)
3 drawers each measuring 21-1/4" wide-17-1/2" deep-4" high
Compartment-26" wide—17" deep-10-1/2" high
Shipping weight-100 lbs.

\section*{ROLLS AND ENVELOPES}

Made of strong oil-resistant red plastic trimmed in black with black tie tapes or button snaps. Each has transparent plastic pockets for best visibility and easy access to tools.

\section*{LR5 CLEAR PLASTIC ENVELOPE}

Has fold-over flap with snap button fastener.
WIDTH 5-1/2" HEIGHT (CAPACITY) 2-3/4" WEIGHT LBS. . 032

\section*{LR8 PLASTIC ROLL}

Made with fold-over flap with tie tapes. Has four (4) pockets. WIDTH 3-7/8" HEIGHT (CAPACITY) 4-1/4" WEIGHT LBS. . 032

\section*{LR12 PLASTIC ENVELOPE}

This roll has three (3) pockets, fold-over flap with double snap button fasteners.
WIDTH 7"
HEIGHT (CAPACITY) 6"
WEIGHT LBS. . 047

\section*{LR24 PLASTIC ROLL}

Has five (5) plastic pockets and tie tapes.
WIDTH 5-3/4" HEIGHT (CAPACITY) \(5^{\prime \prime}\)
WEIGHT LBS. . 062

\section*{LR28 PLASTIC ROLL}

This roll features nine (9) pockets with fold-over flap and tie tapes.
WIDTH 9 "
HEIGHT (CAPACITY) 5-1/4" WEIGHT LBS. . 062

\section*{LR36 PLASTIC ROLL}


Has eleven (11) pockets with fold-over flap and tie tapes.
WIDTH 10-3/8" HEIGHT (CAPACITY) \(6^{\prime \prime}\) WEIGHT LBS. . 047

\section*{LR56 PLASTIC ROLL}

Featuring six (6) pockets with fold-over flap and tie tapes.
WIDTH 11-5/8" HEIGHT (CAPACITY) \(13^{\prime \prime}\) WEIGHT LBS. . 156


\section*{LR70 PLASTIC ROLL}

Has five (5) pockets with fold-over flap with tie tapes.
WIDTH 7-1/2" HEIGHT (CAPACITY) 9-5/8" WEIGHT LBS. . 093

\section*{LR72 PLASTIC ROLL}

This roll features five (5) plastic pockets and fold-over flap with tie tapes.
WIDTH 7-1/2"
HEIGHT (CAPACITY) 12-1/16" WEIGHT LBS. . 125


\section*{LR80 PLASTIC ROLL}

Has seven (7) plastic pockets, fold-over flaps and tie tapes.
WIDTH \(10-1 / 4^{\prime \prime}\) HEIGHT (CAPACITY) \(13-1 / 4^{\prime \prime}\) WEIGHT LBS. . 031

\section*{LR84 PLASTIC ROLL}

Features eight (8) pockets, fold-over flap and tie tape. WIDTH \(12^{\prime \prime}\)


\section*{LR96 PLASTIC ROLL}

Here is a large roll with thirteen (13) pockets, fold-over flap and tie tapes.

WIDTH 17-1/4"
HEIGHT (CAPACITY) 9-5/8"
WEIGHT LBS. . 125

\section*{LR97 PLASTIC ROLL}

Contains five (5) pockets, flap and tie tapes.
WIDTH \(121 / 4^{\prime \prime}\) HEIGHT (CAPACITY) \(141 / 4^{\prime \prime}\) WEIGHT LBS. . 156

\section*{ABUSED TOOLS ARE NOT REPLACEABLE UNDER BONNEY'S GUARANTEE}


This illustration depicts a socket which has been improperly used on an impact gun. These sockets are designed for a specific use as hand tools and were not intended for use on impact guns or nut runners. The highly repeated blows imparted by an impact gun subject these sockets to severe stresses for which they were not intended and the cracks in these sockets were not caused by defective material or workmanship, but by ABUSE! The drive square is the characteristic which identifies an abused socket which has been used on an impact gun. Noting the drive square, in the above illustration, it is evident that the corners have been rounded off and the metal on the sides of the square have been peened up over the edge, causing a rounded effect. This can be seen by the highlights in the photograph. If these sockets had been broken from a high stress imparted by a static torque the metal would not have been moved out of the square, but the socket would have simply split up the side.

The illustration above shows a hinge handle which has been abused. Various sharp nicks and dents in the handle show that the handle was hammered on to break loose or tighten a nut. This has the same effect on a tool as an impact gun creating high stresses throughout the tool. The hinge handle illustrated above was not broken because of poor workmanship or material, but simply by ABUSE!

The screwdriver illustrated above with the broken blade was not caused by defective workmanship or material, but by excessive stress being put on the square shank of the screwdriver with a wrench. Nicks and sharp burrs in the shank were caused by a wrench. Although a square shank screwdriver or one with a hexagon or square bolster invites the use of a wrench for loosening tight screws, it must be remembered that the blades were not designed to take this excessive force! Tool users should practice extreme caution in using any screwdriver in this manner. All factors in this case point to extreme abuse in using said tool, not to defect in workmanship or materials.

\section*{American Standard Taper Pipe Threads}

For all dimensions see corresponding reference letters in table.
Angle between sides of thread is 60 degrees. Taper of thread, on diameter, is \(3 / 4\) inch per foot.

The basic thread depth is 0.8 X pitch of thread and the crest and root are truncated an amount equal to 0.033 X pitch, excepting 8 threads per inch which have a basic depth of 0.788 X pitch, and are truncated 0.045 X pitch at the crest and 0.033 X pitch at the root.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{2}{|r|}{Pipe Size} & & \multicolumn{2}{|l|}{Pitch Diameter} & \multicolumn{4}{|c|}{Length} \\
\hline Nom- & & & & & \[
\begin{aligned}
& \text { Length } \\
& \text { of }
\end{aligned}
\] & and- & & Dep \\
\hline & & - & & & & & & \\
\hline & & & Exter & & & Engage- & & Threads \\
\hline Size & Diam. & Inch & Thread & Thread & Thread & ment & Threads & (Max.) \\
\hline & B & & F & E & C & D & & K \\
\hline 1/8 & 0.405 & 27 & 0.3635 & 0.3747 & 0.2638 & 0.180 & 0.128 & 02963 \\
\hline 1/4 & 0.540 & 18 & 0.47739 & 0.48989 & 0.4018 & 0.200 & 0.1928 & 0.04444 \\
\hline 3/8 & 0.675 & 18 & 0.61201 & 0.62701 & 0.4078 & 0.240 & 0.1928 & 0.0444 \\
\hline 1/2 & 0.840 & 14 & 0.75843 & 0.75843 & 0.5337 & 0.320 & 0.2478 & 0.05714 \\
\hline 3/4 & 1.050 & 14 & 0.96768 & 0.98887 & 0.5457 & 0.339 & 0.2478 & 0.05714 \\
\hline 1 & 1.315 & 11-1/2 & 1.21363 & 1.23863 & 0.6828 & 0.400 & 0.3017 & 0.06957 \\
\hline 1-1/4 & 1.660 & 11-1/2 & 1.55713 & 1.58338 & 0.7068 & 0.420 & 0.3017 & 0.06 \\
\hline 1-1/2 & 1.900 & 11-1/2 & 1.79609 & 1.82234 & 0.7235 & 0.420 & 0.3017 & 0.0 \\
\hline 2 & 2.375 & 11-1/2 & 2.26902 & 2.29627 & 0.7565 & 0.436 & 0.3017 & 0.06 \\
\hline 2-1/2 & 2.875 & 8 & 2.71953 & 2.76216 & 1.1375 & 0.682 & 0.4337 & 0.09 \\
\hline 3 & 3.500 & & 3.34063 & 3.38850 & 1.2000 & 0.766 & 0.4337 & 0.09 \\
\hline 3-1/2 & 4.000 & 8 & 3.83750 & 3.88881 & 1.2500 & 0.821 & 0.4337 & 0.09 \\
\hline 4 & 4.500 & 8 & 4.33438 & 4.38713 & 1.3000 & 0.844 & 0.4337 & 0.098 \\
\hline 5 & 5.563 & 8 & 5.39073 & 5.44929 & 1.4063 & 0.937 & 0.4337 & 0.09850 \\
\hline 6 & 6.625 & 8 & 6.44609 & 6.50597 & 1.5125 & 0.958 & 0.4337 & 0.09850 \\
\hline 8 & 8.625 & 8 & 8.43359 & 8.50003 & 1.7125 & 1.063 & 0.4337 & 0.09850 \\
\hline 10 & 10.750 & 8 & 10.54531 & 10.62094 & 1.9250 & 1.210 & 0.4337 & 0.09850 \\
\hline 12 & 12.750 & 8 & 12.53281 & 12.61781 & 2.1250 & 1.360 & 0.4337 & 0.09850 \\
\hline 14 OD & 14.000 & 8 & 13.77500 & 13.87263 & 2.2500 & 1.562 & 0.4337 & 0.09850 \\
\hline 16 OD & 16.000 & 8 & 15.76250 & 15.87575 & 2.4500 & 1.812 & 0.4337 & 0.09850 \\
\hline 18 OD & 18.000 & 8 & 17.75000 & 17.87500 & 2.6500 & 2.000 & 0.4337 & 0.09850 \\
\hline 20 OD & 20.000 & 8 & 19.73750 & 19.87031 & 2.8500 & 2.125 & 0.4337 & 0.09850 \\
\hline 24 OD & 24.000 & 8 & 23.71250 & 23.86094 & 3.2500 & 2.375 & 0.4337 & 0.09850 \\
\hline
\end{tabular}


TAP AND CLEARANCE DRILLS FOR STANDARD MACHINE SCREWS

FINE THREADS
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Screw \\
No. or Diam.
\end{tabular}} & \multirow[t]{2}{*}{Thds. per Inch} & \multirow[t]{2}{*}{\begin{tabular}{l}
Tap \\
Size
\end{tabular}} & \multicolumn{2}{|l|}{Clearance Hole Drill Size} & \multirow[t]{2}{*}{\begin{tabular}{l}
Screw \\
No. or \\
Diam.
\end{tabular}} & \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { Thds. } \\
& \text { per } \\
& \text { Inch }
\end{aligned}
\]} & \multirow[t]{2}{*}{\begin{tabular}{l}
Tap \\
Drill \\
Size
\end{tabular}} & \multicolumn{2}{|l|}{Clearance Hole Drill Size} \\
\hline & & & Close & Free & & & & Close & Free \\
\hline 0 & 80 & 3/64 & 52 & 50 & & 64 & 53 & 48 & 46 \\
\hline 1 & 72 & 53 & 48 & 46 & 2 & 56 & 50 & 43 & 41 \\
\hline 2 & 64 & 50 & 43 & 41 & 3 & 48 & 47 & 37 & 35 \\
\hline 3 & 56 & 45 & 37 & 35 & 4 & 40 & 43 & 32 & 30 \\
\hline 4 & 48 & 42 & 32 & 30 & 5 & 40 & 38 & 30 & 29 \\
\hline 5 & 44 & 37 & 30 & 29 & 6 & 32 & 36 & 27 & 25 \\
\hline 6 & 40 & 33 & 27 & 25 & 8 & 32 & 29 & 18 & 16 \\
\hline 8 & 36 & 29 & 18 & 16 & 10 & 24 & 25 & 18
9 & 16
7 \\
\hline 10 & 32 & 21 & 9
2 & 7 & 12 & 24 & 25
16 & 9
2 & 7 \\
\hline \(1 / 4\) & 28 & 3 & F & H & 1/4 & 20 & 7 & F & H \\
\hline 5/16 & 24 & 1 & P & Q & 5/16 & 18 & F & P & Q \\
\hline 3/8 & 24 & Q & W & X & 3/8 & 16 & 5/16 & W & X \\
\hline 7/16 & 20 & 25/64 & 29/64 & 15/32 & 7/16 & 14 & U & 29/64 & 15/32 \\
\hline 1/2 & 20 & 29/64 & 33/64 & 17/32 & 1/2 & 13 & 27/64 & 33/64 & 17/32 \\
\hline
\end{tabular}

\section*{ERRATA SHEET}

This sheet is for the convenience of those who desire an up-to-date catalog at all times. When an error or addition is discovered-fill in the information on one of these lines and mark the line number in the proper place in the catalog. This will give an easy and quick reference for future questions on the same item.
\begin{tabular}{l}
\hline 1 \\
\hline 2 \\
\hline 3 \\
\hline 4 \\
\hline 5 \\
\hline 6 \\
\hline 7 \\
\hline 8 \\
\hline 9 \\
\hline 10 \\
\hline 11 \\
\hline 12 \\
\hline 13 \\
\hline 14 \\
\hline 15 \\
\hline 16 \\
\hline 17 \\
\hline 18 \\
\hline 19 \\
\hline 20 \\
\hline 21 \\
\hline 22
\end{tabular}
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